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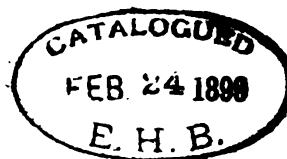
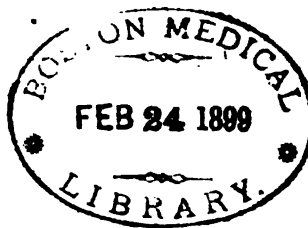
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INDEX.

	Page		Page		Page
ABDOMINAL Case, Obscure, by W. N. Robertson, M.B., C.M.	243	Barclay, H. C., M.D., Abscess of Thyroid Complicating Pleurisy	111	Cerebral Compression, Effect of, on the Pulse, by N. W. Kater, M.B.	308
Abdominal Section for Gastric Ulcer	240	Barnett, L. E., F.R.C.S., Removal of Foreign Body from Left Bronchus of a Child	258	Change of Address, 43, 89, 138, 182, 228, 278, 320, 368, 416, 459, 508, 552	
Abscess Cerebral	290	" Lymphangioma	297	Chloroform Syncope, by Hon. W. F. Taylor, M.D.	384
" of Cerebellum following Disease of Ear, by T. S. Kirkland, M.D., F.R.C.S.E.	303	Batchelor, F. C., M.D., Early Ectopic Gestation	151	Civil Ambulance and Transport and the Medical Profession (Letter)	36
" Hepatic	244	" Cesarean Section, Contracted Pelvis Battle of the Clubs (Letter)	131	Cirrhosis, A Rare Form of Hepatic	94
" Perinephritic and Subdiaphragmatic Round-celled Sarcoma growing on site of	302	Battle of the Clubs	136, 275, 468, 680	Clarke, A. H., M.R.C.S., Round Celled Sarcoma Growing on Site of Abscess	302
" Subphrenic, Case of	246	Bechevolent Fund, N.S.W. Medical	229	Clive-Lowe, G. de L.R.C.P. Edin., Uncontrollable Vomiting from Childhood, Producing Gastric Ulcer, Abdominal Section, Cure	240
" of Thyroid complicating Pleurisy, by H. C. Barclay, M.D.	111	Beri-Beri, Case of, by J. F. Nall, F.R.C.S. (Letter)	177	Clubbe, C. P. B., L.R.C.P. Lond. Presidential Address	139
Action for Damages against a Medical Man in South Australia	317	Bifocal Lenses (Letter)	32, 224	" Laparotomy, Five Cases of, for Perforation of Hollow Viscera—Four Recoveries	231
Adelaide Hospital and Dr. Giles' Address (Letter)	362	Bird, F., M.B., Case of Tearing Away of Urinary Bladder from its Pelvic Connections	215	Colon, Case of Invagination into Rectum, Due to Malignant Ulceration, by T. E. Smyth, M.D.	62
Air Passages—		Birthe, Marriages, and Deaths	46, 90, 138, 184, 229, 278, 322, 370, 418, 462, 510, 554	Conjunctivitis Case of Plastic, by T. K. Hamilton, M.D.	168
Foreign Bodies in, by A. E. Wigg, M.D.	171	Bladder, Urinary, Case of Tearing Away of, from Pelvic Connections, by F. Bird, M.B.	215	Constipation, Obstinate, Caused by Enterolith Deposit around Hair Balls, by D. Officer, M.B.	26
Foreign Bodies in, by J. C. Verco, M.D.	209	Borax in Cases of Epilepsy, by C. E. Todd, M.D., Brax.	294	Contagious Diseases Act in New Zealand, by R. Fulton, M.B., C.M.	66, 116
Foreign Bodies in, by H. Swift, M.D.	172	Borthwick, Thom., M.D. Work Done, and Methods Employed, at Laboratory, Children's Hospital, Adelaide	58	Cookson, R. G., L.R.C.P., Rapidly Fatal Termination, Case Diabetes Mellitus	293
Foreign Bodies in (Letter)	224	" The Bacteriology of Empyema	468	Councillors of N.S.W. Medical Societies	407
Removal of a Foreign Body from the Left Bronchus of a Child, by L. E. Barnett, F.R.C.S.	258	Bowler, R. Steer, M.R.C.S.K., Perforating Gastric Ulcer—Operation—Pneumonia—Recovery	477	Craig, R. G., M.B., Case of Prostatectomy	237
Albuminuria from a Life Assurance Point of View, by J. W. Springthorpe, M.D.	419	Brain, Hydatid of—Operation—Recovery	47	Crago, W. H., M.R.C.S., Note on Infantile Scurvy	253
Amebic Abscess of the Liver and Lung, by Thos. F. Asch, M.D.	511	" Hydatid Disease of the	431	Craniotomy, Subsequent Successful Induction of Premature Labour, Child Inubated, by F. A. Nyulasy, M.B., Ch.B.	347
" Pathological Notes on, by J. L. T. Ibbister, M.B.	512	British Medical Association—		Osgooden, G., L.R.C.P., Case of Puerperal Infection Treated by Antistreptococcus Serum	249
Amputation at Shoulder Joint, and Suprapubic Lithotomy, Presenting Unusual Features	349	N.S.W. Branch, Notice of Meeting, 56, 94, 146, 202, 243, 282, 338, 384, 427, 478, 513		Cutaneous Deformity Following Extensive Suppuration in Infancy, by E. S. Stokes, M.B. (Illustrated)	393
Anaesthesia—		" Ballarat District Branch	493	DAMAGES, Action for, in South Australia	317
in Dental Operations (Letter)	271	" Launceston Sub-Branch	480	Davy, T. G., M.D., Removal of Left Half of Tongue for Epithelioma Ligature of Lingual Artery	143
in Dental Operations, J. L. Gibson, M.D., <i>erratum</i>	306	" N.S.W. Branch, Annual Meeting	164	Decapitation by a Primitive Method, by T. W. Fairman, L.R.C.P.	399
Anderson, A. V. M., M.D., Diagnostic Signs of Typhoid Fever	250	" N.S.W. Branch, Monthly Meetings, 20, 219, 264, 311, 357, 401, 444, 485, 535		Dengue Fever, Discussion on	124, 130
Anderson, T. L., M.B., Acute Pneumonic Phthisis	121	" New Zealand Branch, Report of Annual Meeting	265	" Acute Inflammatory Glaucoma, Induced by	339
Annotations, Departure of Dr. Reanle for England	411	" New Zealand Branch, 26, 75, 126, 169, 267, 309, 356, 404, 491, 538		" Epidemic of, in 1897, in North Queensland, by F. E. Hare, M.D.	98
" Regina v. Orpen	464	" Queensland Branch, Annual Meeting, 124, 262, 403, 447		Dentistry, College of, in Victoria, Opening of New Premises	37
" Presentations to Miss Gouli, Matron Sydney Hospital	504	" Queensland Branch	309	Desmond, Veterinary Surgeon, Method of Preparing Kangaroo Tendons for Surgical Operations (Illustrated)	96
Ante-partum Hemorrhage, Two Cases of, by F. Meyer, M.B., B.S.	16	" South Australian Branch, Annual Meeting	309	Diabetes Mellitus, Rapid, Fatal Termination, by R. G. Cookson, L.R.C.P.	293
Anthrax, Case of, by A. F. Hepworth, L.R.C.P.	533	" South Australian Branch, 74, 137, 168, 219, 260, 309, 351, 399, 441, 485, 539		Discussions—	
Antistreptococcus Serum for Puerperal Infection	249	" Victorian Branch, 23, 167, 214, 264, 354, 400, 449, 487, 534		" on Early Ectopic Gestation	167
" Fatal Case of Puerperal Septicemia treated with, by T. J. Henry, F.R.C.S.	301	" West Australian Branch	471	" on Appendicitis	216
Aortic Disease with Embolism, by J. M. Gardiner, M.B., Ch.M.	282	Bronchitis (Acute) and Broncho-Pneumonia in Young Children, Notes on the Pathology and Treatment of, by R. R. Stawell, M.D.	388	" on Dengue	14, 130
Appendicitis, Discussion on	216	CÆSAREAN Section, Case of Contracted Pelvis, by F. C. Batchelor, M.D.	341	" on Epidemic Exanthema	447
Armstrong, W. H., M.B., D.P.H., Disinfection of Dwellings in Notifiable Infectious Diseases	422	Campbell, C. G., M.B., Secondary Laparotomy for Ovarian Tumour	108	" on Epidemic of Influenza and Measles	444
Arthur, R., M.D., Aseptic Midwifery	102	Cancer in New Zealand, Presidential Address, by W. Fell, M.D.	185	" on Tuberculosis	264
Aseptic Midwifery, by R. Arthur, M.D.	109	" of Uterus, by E. T. Thrin, F.R.C.S. Eng.	340	Diphtheria, Notes on the Slow Pulse Following, Case of Very Slow Pulse	55
Assurance, Medical	273, 314	Carbolic Acid Poisoning, Case of, by W. A. Fleming, M.B., C.M. Edin.	336	" An Outbreak of, in a Country District, by W. E. Stevens, M.R.C.S.	426
Asthma Relieved by Dilatation of Gervix, by A. W. Marwood, L.R.C.S.	429	Carrozzo A. B., M.B., C.M., Case of Quiet Pleurisy with Effusion	218	" Treatment of, by T. Wyld Fairman, L.R.C.P.	526
Australasian Medical Board, Proceedings of 46, 90, 137, 184, 219, 278, 322, 370, 418, 462, 510, 554		Cataract, Peculiar Binocular Lamellar, by J. L. Gibson, M.D. (Illustrated)	305		
BACTERIOLOGICAL Examination of Water, Milk, and Sewage, S. Brisbane, by A. C. F. Halford, M.B. (Illustrated)	279	Cerebellum, Abscess of, Following Disease of Ear	303		
Ballarat District Medical Society 127, 366, 405		Cerebral Abscess, by J. M. Gardiner, M.B., Ch.B.	299		

	Page		Page		Page
Disinfection of Dwellings in Notifiable Infectious Diseases, by W. G. Armstrong, M.B., D.P.H.	422	Exophthalmos, Case of Pulsating (L), with Double Ophthalmoplegia Externa and Interna, following Severe Injury to the Head, by T. K. Hamilton, M.D.	442	Gibson, J. Lockhart, M.D., Peculiar Binoctular Lamellar Cataract (Illus.)	208
Dixon, G. P., M.B., Hypertrophy of the Thyroid Gland Causing Fatal Pressure Symptoms	520	" Monocular (R.), Case for Diagnosis, by A. L. Kenny, M.B.	530	Giles, W. A., M.B., Ch.M. Edin., Hepatic Abscess	244
Drake, F. J., M.B., Typhoid Fever Complicated by Hemorrhage and Collapse, Treated by Transfusion of Normal Saline Solution—Recovery	525	Extracts, Short, from Foreign Medical Literature, by W. Spencer, M.D. 72, 121, 231, 501, 545		" Presidential Address	323
EARINGS, G. R., M.D., Puerperal Septicæmia Successfully Treated by Hypodermatic Injection of Saline Solution	345	Ewart, J., M.D., Radical Cure of Hernia	206	Gillies, Sinclair, M.A., M.D., Three Cases of Epidemic Cerebro-spinal Meningitis	470
Eastern Suburbs Medical Association of Sydney	175	Eyeball, Foreign Bodies in, by T. K. Hamilton, M.D., F.R.C.S.I.	260	Glaucouma, Acute Inflammatory, Induced by Dengue, by J. L. Gibson, M.D.	339
" Eighth Annual Meeting	501	Eye Specialists to Lodges (Letter)	362	" Associated with Lachrymal Stricture, by G. H. Hogg, M.D.	450
Eczema, Iodoform, a Family Idiosyncrasy	474	FAITHFULL, R. L., M.D., Use and Abuse of Narcotics, Hypnotics, and Analgesics	334	Green, T. A., M.B., Gunshot Wound (Illustrated)	239
Editorials—		Fell, W., M.D., Cancer in New Zealand—Presidential Address	185	Gregg, J., M.B., Case of Rapidly-spreading Gangrene of Both Legs	113
Alleged Criminal Abortion in the Australasian Colonies	453	Fenwick, P. C., M.B., Use of the Urethroscope	213	Gould, Presentations to, Miss, Matron Sydney Hospital	504
As Others See Us	83	Finaschi, Thos., M.D., Ch.D., Intra-peritoneal Operation for Abdominal Hydatids by Russell's Method, Five Cases of	5	Gunshot Wound, by T. A. Green, M.B. (Illustrated)	239
Decreased Birth Rate in New South Wales	502	" Two Cases of Extreme Prolapse of Rectum	474	Guthrie, E., M.B., on the New "British Pharmacopœia	493
Diseased Meat in Sydney	438	" Case of Amoebic Abscess of the Liver and Lung	511	HÆMORRHAGE, Ante-partum, Two Cases of	16
Drainage of Hobart, Tasmania, The	410	Fibro-myoma of Uterus—Hysterectomy—Secondary Hemorrhage—Abdomen Reopened—Discharge of Ligatures by Bladder—Recovery, by D. Hardie, M.D.	337	Halford, A. C. F., M.B., Bacteriological Examination of Water, Milk, and Sewage, South Brisbane (Illustrated)	279
Dr. William Pepper	503	Finlay, Rev. H., M.D., Pemphigus Contagiosus Tropicus	114	Hamilton, J. A. G., Case of Hydatids	212
Federation	222	Fischer, G. A., M.B., Foreign Body in the Glottis (Illustrated)	442	Hamilton, T. K., M.D., F.R.C.S.I., Case of Plastic Conjunctivitis	168
Federation—University and Primary Education	315	" Hydatid Disease of Brain	431	" Eyeball, Foreign Bodies in	260
Hospital Abuse	83	Fleming, W. A., M.B., C.M. Edin., Case of Carbolic Acid Poisoning	336	" Ophthalmoma, Case of	442
Hospital Abuse in New South Wales	365	Folie & Deux, by J. L. Thompson, M.B., Ch.M. Edin., and W. B. Smith, F.R.C.S.	327	" Post-influenza Mastoid Suppuration Running Latent Course Presenting Symptoms of Trigeminal Neuralgia	430
Hospital Saturday, The, in Sydney	363	Foods and Beverages Manufactured in the Colonies, Report on Lager Beer	122	" Spontaneous Ophthalmoma—Case of Pulsating Exophthalmos—Double Ophthalmoplegia Externa and Interna Following Severe Injury to the Head	442
Indigenous Vegetable Drugs	503	Foreign Body in Air Passages	171, 182, 209, 224	" Staphylococcus Corneæ, Two Cases of	260
Insanitary Dwellings in Sydney	223	" in the Glottis (Illustrated), by G. A. Fischer, M.B.	442	" Ulceration of Pharynx in Hereditary Syphilis	168
Irregular Medical Practice in New South Wales	80	" Removal of, from Left Bronchus of a Child	238	Hardie, David, M.D., Fibro-myoma of Uterus—Secondary Hemorrhage—Abdomen Reopened—Discharge of Ligatures by Bladder—Recovery	337
Launceston (Tas.) Hospital Question	133	Francis, Alex., B.A., M.B., Presidential Address, Medical Society, Queensland	1	" Sarcoma of Kidney—Nephrectomy	296
Lead Poisoning in Queensland	270	Fulton, R., M.B., C.M., The Contagious Diseases Act in New Zealand	68, 116	Hare, F. K., M.D., The 1897 Epidemic of Dengue in North Queensland	98
Lead Poisoning	316	GANGRENE of both Legs, Case of Rapidly-spreading, by J. Gregg, M.B.	113	Harris, L. H. L., M.B., Ch.M., Striker for Applying Plaster of Paris to Fractures of Femur (Illustrated)	344
Lethbridge v. Boyd	35	Garde, H. C., F.R.C.S., Splenectomy for Hypertrophy of Spleen	434	Harrold, R. E., M.B., Ch.M. Edin., Pityriasis Rubra	353
Medical Co-operation	268	Gardiner, J. M., M.B., Ch.M., Cerebral Abscess	299	Hayward, W. T., M.R.C.S., L.R.C.P.I., Empyema, its Etiology and Treatment	465
Medical Officer for Friendly Societies	269	" Aortic Disease with Embolism	212	Head Injury, Remarkable Case of Fatal, by J. MacPherson, M.B.	519
" Medical Press, The," and Irregular Practice in New South Wales	270	Gastric Ulcer (caused by Hydatid Cyst)	342	Heart Patient, Notes on Three Cases of Peculiar Respiratory Symptoms in the Death of a Congenital, by D. Officer, M.B.	25
" Medical Press, The," and Newspaper Ethics	222	" Interesting Case of, by F. H. Quaife, M.D.	281	Helsham, W. M., M.R.O.S., Case of Absence of Soft Palate, with Cleft Tongue	146
Medical Examinations in Queensland	366	" Perforating Operation—Pneumonia—Recovery, by R. Steer Bowker, M.R.C.S.E.	477	Henry, T. J., F.R.C.S., Fatal Case of Acute Puerperal Septicæmia Treated with Antistreptococcus Serum	201
Midwifery Nurses Bill of New South Wales	462	" Prolapsed from Uncontrollable Vomiting from Childhood, Abdominal Section—Cure	240	Hepatic Abscess, by W. A. Giles, M.B., Ch.M.	241
Milk Adulteration in New South Wales	294	" and Secondary Parotiditis, by F. S. Hone, M.B., B.Ch.	10	Hepatic Cirrhosis, A Rare Form of, by A. J. Turner, M.D.	94
New Pathological Department, Sydney Hospital	132	Gestation, Early Ectopic, by F. Batchelor, M.D.	151	Hepworth, A. F., L.R.C.P., Case of Anthrax	533
New South Wales Register of Medical Practitioners	83	" Early Ectopic, Discussion on	157	Hernia, Congenital Umbilical—Child One Day Old—Operation, Recovery, by A. L. Levy, L.R.C.S., Ed. (Illustrated)	301
New Zealand Branch of British Medical Association	544	" Ectopic, by T. C. Moore, M.D.	165	" Radical Cure of, by J. Ewart, M.D.	206
Professional Testimonials	316	" Ectopic, of Thirteen Months—Suppuration—Cure, by A. Martin, M.D.	186	" Radical Cure of Femoral, by T. H. Lewis, M.R.C.S.	519
Preconceptions Under the Health Act, Victoria	271	" Ectopic, Rupture about Eighth Week—Operation—Recovery, by H. B. Leatham, M.R.C.S.	185	Hinder, H. V. C., M.B., Ch.M., Four Cases of Prostatectomy (Illustrated)	234
Public Health Act of New South Wales	86	Gibbes, J. Murray, M.D., Prescription for Sciatica	62	" Fatal Case of Hydatid of Lung	348
Public Health in Tasmania	409	" Philosophy of Disease, IV.	63	Hirschfeld, K., M.D., Amphoric Respiration During the Course of Croupous Pneumonia	64
Quinn v. Watson	81	" Cold Air Treatment of Typhoid Fevers (Illustrated)	158	Hislop, P. W., M.B., C.M., Edin., Case of Rigid Os Uteri Treated by Hot Baths	19
Rationale of Miraculous Cures in Modern Days	82	Gibson, J. Lockhart, M.D., Acute Inflammatory Glaucoma Induced by Dengue	339	Hogg, G. Heuze, M.D., Case of Glaucoma Associated with Lachrymal Stricture	460
Royal Army Medical Corps, The	271				
Sick-room Appliances	223				
Treatment of the Insane in South Australia	544				
Unsound and Adulterated Food	179				
Embolicism with Aortic Disease	252				
Empyema, Bacteriology of, by T. Borthwick, M.D.	498				
" Bacteriology of, by H. M. Evans, M.B.	528				
" Case of, by B. Poulton, M.D.	469				
" Its Etiology and Treatment, by W. T. Hayward, M.R.C.S., L.R.C.P.I.,	465				
Epilepsy, Borax in Cases of	294				
Esler, A. W., M.D., Iodoform Eczema, a Family Idiosyncrasy	474				
Etiology of Infection, by T. A. Wilson, M.B.	283				
Evans, H. M., M.B., Bacteriology of Empyema	528				
Examination of Urine in Insurance Cases (Letter)	504				
Exanthema, Epidemic, Discussion on (Brisbane)	447				

LACTOPEPTINE

For Diseases of the Stomach

"We can confidently recommend it."—*British Medical Journal.*

CASE I.

A DYSPEPTIC CASE.—Mr. D., aged sixty; stone mason. Has gradually been getting worse, no matter what diet he takes.

May 1st, 1897.—Complained of pains shortly after taking food, at the pit of the stomach, which extended sometimes round left hydrochondriac region. He used to take tea cold when fasting. I gave him a mixture containing Sod. Bicarb., Glycerine Ac. Carb., Tinct. Capsici, Aq. Aurantii, Aq. Chlorof. and three Lactopeptine (Richards) powders, one to be taken after the principal meal; on May 4th "He was no worse."

May 8th.—I gave him the following mixture—

R.	Liq. Ammon. et Bia. Cit.	...	...	℥j
	Tinct. Capsici ...	...	...	℥xviii
	Glycerine Acid Carb. ...	...	...	℥vj
	Tinct. Aurant.	...	...	℥j
	Aq. Aurant. et Chlorof.	...	...	℥vj

$\frac{1}{2}$ part every three hours.

I repeated the powders.

May 11th.—"He was better till to-day." Repeated the mixture and Lactopeptine (Richards) powders.

On enquiry, he gave it as his opinion that the powders "relieved the wind" (meteorism). He is still under treatment. I give small doses in this case, as his symptoms are not very severe and he continues his work.

CASE II.

GASTRIC DERANGEMENT IN A CHILD.—M. W. æt. two. This child, when first visited, was found *suffering with symptoms of gastric derangement, colic, vomiting, and loss of flesh.* On enquiry, the fact was elicited that the diet consisted of anything that could be obtained, from a piece of cheese to a bit of dried cod or potato. As there seemed no chance of providing more suitable food for the child, it was hoped that by means of *Lactopeptine* the diet might be made more digestible and nourishing. Acting on the suggestion, she was ordered gr. v. of the drug three times daily after food. The result was more favourable than was at first expected, and the treatment was combined, as far as possible, with regularity of habits, meals, &c., and the little patient when last seen was quite well.

LACTOPEPTINE

For Diseases of the Stomach

"We can confidently recommend it."—*British Medical Journal*

CASE III.

GASTRIC CATARRH.—Mrs. W., aged sixty-nine, wife of a clerk of works. *History*—Had a *second* stroke of hemiplegia on March 25th last; blisters were applied to temples; the paralysis affected the muscles of the neck, face and tongue, and right side, arm and leg. The first attack was on left side, which recovered some power.

After ascertaining her capacity for swallowing, we fed her with drops of liquid nourishment at first; she complained of dryness of the throat; had to be constantly changed in position, and could not lie comfortably on her left side.

She suffered from gastric catarrh, causing a cough, before this last seizure which I relieved to some extent. . . . She was, and continued to be, quite conscious as at present. Not being able to take exercise, the difficulty of digesting her food was increased; hence her *restlessness* after taking it and the feeling of *oppression* food caused. Lactopeptine (Richards) I found cleaned the tongue. She had, of course, to be waited on day and night; for some weeks during this month and end of last, she has been got up daily.

On Good Friday, April 16th, I began the use of Lactopeptine (Richards) powders, given after the principal meal in small doses, and I have continued to give them yet (end of May), and hope to do so while relief is felt by their use.

On April 17th, patient said that "the powder (Lactopeptine) (Richards) relieved her"; she was not so restless and did not require to be moved so often. Appetite improved; she slept, and can move right big toe.

April 19th.—Powders continue to give relief. Can move joint of foot (metatarsal-phalangeal). She had various patent foods, and could swallow better and enjoy her nourishment.

April 29th.—Had darting pains in the head.

May 7th.—Seen, better. Some days she takes a bit of ordinary dinner.

May 9th.—Can move right knee.

She had many critical turns at the earlier part of her illness, and at one time did not like to sleep on account of the sinking feeling she felt then, and could only swallow in drops. When she could digest her food, the digested food appears to have nourished all the vital organs, which did their work better, and as she felt better she had better hope of progress, which naturally quickened her circulation and vitality so that she was at times quite hearty.

In the above case the head and neck muscles got stronger, and the improvement was no doubt due to digested pabulum being sent to compensatory parts of the brain, as well as to contraction of the cerebral thrombus.

Lactopeptine (Richards) marketed in Tablets (5 gr.) and Powder. 3 sizes, 1-oz 3s. 3d.; 4-oz., 10s. 6d.; 8-oz., 20s. 6d. (Prices in London for Dispensing and to the Medical Profession only.)

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	Page		Page		Page
Hone, F. S., M.B., B.Ch., Gastric Ulcer and Secondary Parotiditis ..	50	Laparotomy, Secondary, for Ovarian Tumour, by G. C. Campbell, M.B.	108	Marten, R. H., M.B., B.C., Case of Sub-phrenic Abscess ..	246
Hopkin, Note on ..	278	" Some Unusual Complications After, by J. E. Wolfhagen, M.B. ..	398	Martin, A., M.D., Ectopic Gestation of Thirteen Months—Suppuration—Cure ..	156
Hopkins, G. H., F.R.C.S., Four Cases of Nephro-Lithotomy ..	515	Lawrence, H., L.R.C.P., Tuberculosis of Pharynx and Skin ..	214	Marwood, A. W., L.R.C.S., Asthma Relieved by Dilatation of Cervix ..	429
Horrocks, H., M.D., B.Sc., Death from Poisoning by Bitter Almonds ..	352	Leatham, H. B., M.R.C.S., Case of Ectopic Gestation—Rupture about 8th week—Operation—Recovery ..	155	Mason, J., M.D., Contribution to the Pathology of Purpura Hemorrhagica ..	203
Hospitals, Payment at (Letter) ..	353	Letters—		Maternal Impression, Unique Case of, by T. Wyld Palmer, L.R.C.P. ..	338
" Country, why a Failure in France, by Ed. Conner ..	528	Bi-focal Lense ..	32	Mean Lodge Patients ..	561
" for the Insane in Victoria, Annual Conference of the Medical Staff ..	546	" Medical Profession in New South Wales and the Civil Ambulance and Transport Brigade ..	3	Medical Assurance (Letter) ..	314
Hughes, S. H., F.R.C.S. Eng., Case of Pigmentation of Conjunctiva ..	444	" Medical Certificates of Deaths ..	79	Medical Appointments, 43, 90, 137, 183, 228, 276, 320, 368, 416, 460, 508, 552	
Hydatids, Abdominal. Intra-peritoneal Operation for, Russell's Method, Five Cases of ..	5	" New Truss for Inguinal Femoral Hernia ..	131	Medical Boards, Proceedings of 46, 90, 137, 184, 229, 278, 322, 370, 418, 462, 510	
" Case of, by J. A. G. Hamilton, M.B. ..	213	" Battle of the Clubs ..	131	Medical Certificates of Death (Letter) ..	79
Hydatid Cyst, Gastric Ulcer Caused by, by E. G. Macdonald, M.D. ..	318	" Professor Schenk's Theory ..	133	Medical Defence Association of Victoria, Limited ..	127
" Disease of Brain, Case of, by G. A. Fischer, M.B. ..	431	" Question of Medical Fee ..	134	Medical Ethics ..	42, 73, 276
" of Brain, by M. M. O'Hara, F.R.C.S.I. ..	57	" Koch's New Tuberculin ..	181	Medical Fees, A Question of, in Sydney ..	89
" of Brain—Operation—Recovery, by W. B. Vance, M.B., Ch.B. ..	57	" Koch's New Tuberculin ..	177	" Question of (Letter) ..	134
" of Lung, Fatal Case of, by H. V. O. Hinder, M.B., Ch.M. ..	348	" Koch's New Tuberculin ..	180	" Charged to a Medical Stepfather (Letter) ..	314
" Pelvic, removed by Perineal Incision, by J. C. Verco, M.D. ..	518	" Bi-focal Lenses ..	224	Medical Insurance, a Suggestion (Letter) ..	272
Hysterectomy—Fibro-myoma of Uterus—Secondary Hemorrhage—Abdomen Reopened Discharge of Ligatures by Bladder—Recovery ..	337	" Foreign Bodies in the Air Passages ..	224	Medico-Legal 40, 89, 136, 182, 225, 274, 415, 551	
INFECTIO, the Etiology of ..	283	" Medico-legal ..	225	Medico-Legal, Regina v. Orpen (Editorial) ..	454
Influenza and Measles, Discussion on Epidemics of ..	444	" Malarial Fever ..	225	Medical Notes, 29, 89, 136, 181, 228, 274, 320, 367, 414, 458, 549	
Influenza, by H. Pollen, M.D. ..	289	" Metamorphosis of Filaria Sanguinis Hominis ..	271	Medical Resignations, 43, 90, 137, 184, 229, 276, 321, 369, 460, 509, 552	
Intra-peritoneal Operation for Abdominal Hydatids, Russell's Method, Five Cases, by T. Flasehl, M.D. ..	5	" Anesthesia in Dental Operations ..	271	Medical Societies of New South Wales ..	407
Intussusception—		" Medical Insurance, a Suggestion ..	272	Medical Women's Association, Melbourne ..	359
" A Case of, by E. T. Macgowan, M.B., B. Ch. ..	267	" Question of Medical Fees Charged to a Medical Step-father ..	314	Medical Profession, Meeting of,—Midwifery Nurses Bill, N.S.W. ..	480
" Case of, by J. Michie, M.B. ..	170	" Medical Assurance ..	314	Medico-Parliamentary ..	42, 415
Iodoform Eczema: A Family Idiocy—crasy, by A. W. Eiler, M.D. ..	474	" Erratum Anesthesia in Dental Operations, Correction of Dr. J. Lockhart Gibson's Letter ..	306	Meningitis, Epidemic Cerebro-spinal, by Sinclair Gillies, M.D. ..	470
Irving, J., M.D., Presidential Address, Canterbury Section New Zealand Branch British Medical Association ..	49	" Dr. Giles' Address and the Adelaide Hospital ..	362	Metamorphosis of Filaria Sanguinis Hominis (Letter) ..	271
Isbister, J. L. T., B.Sc., M.B., Observations on Widal's Reaction ..	331	" Eye Specialists to Lodges ..	382	Meyer, Felix, M.B., B.S., Two Cases of Ante-partum Hemorrhage ..	18
" Pathological Notes on Amoebic Abscesses of the Liver and Lung ..	512	" Examination of Urine in Insurance Cases ..	604	Michie, J., M.B., Case of Intussusception ..	170
JAMIESON, Sydney, B.A., M.B., Widal's Reaction as a Test for Typhoid Fever ..	331	" N.S.W. Branch, British Medical Association, and Medical Association in New South Wales ..	643	Midwifery Nurses Bill, N.S.W., with Suggested Amendments ..	483
Joyce, C., M.B., Cold Pack and Bath in Treatment of Typhoid Fever ..	396	Leucocaine Poisoning, Fatal Illness Apparently from, by J. A. Wheeler, M.B., B.S. ..	30	" Practice, Notes on a Year's, by J. H. Murray Aynsley, M.R.C.S. Eng. ..	17
KANGAROO and Wallaby Tendons, Preparation and Uses of, by A. M. Morgan, M.B. ..	307	Levy, A. L., F.R.C.S., Ed., Congenital Umbilical Hernia, Operation, Child One Day Old, Recovery (Illustrated) ..	300	Military and Defence Appointments 136, 182	
Kangaroo Tendons, Method of Preparing for Surgical Operations, by Veterinary Surgeon Desmond (Illustrated) ..	96	Lewis, T. H., M.R.C.S., Radical Cure of Femoral Hernia ..	519	" Intelligence ..	89, 459, 508, 550
Kater, N. W., M.B., Effect of Cerebral Compression on the Pulse ..	308	Litchfield, W. P., M.B., Ch.M., Notes on the Slow Pulse following Diphtheria—Case of Very Slow Pulse ..	55	Money, A., M.D., Note on Infantile Scurvy ..	283
Kenny, A. L., M.B., Monocular Exophthalmos (R.), Case for Diagnosis ..	530	Literature, Short Extracts from Current Foreign Medical ..	72, 121, 221	Moore, T. C., M.D., Case of Ectopic Gestation ..	155
" Combination of Syphilis and Epithelioma of the Tongue ..	531	Literary Notes ..	274, 367, 416	Morgan, A. M., M.B., Preparation and Use of Kangaroo and Wallaby Tendons ..	307
Kidneys, Notes on Cystic, by F. J. T. Sawkins, M.B., Ch.M. ..	20	Lithotomy, Supra-pubic and Amputations at Shoulder Joint, by J. E. Trevor, M.R.C.S. Eng. ..	319	Mullins, G. Lane, M.A., M.D., Tuberculosis and Public Health ..	9
Kidney, Sarcoma of ..	298	London Letter ..	546	" Brief History of Smallpox and Vaccination in New South Wales ..	147
Kirkland, T. S., M.D., F.R.C.S.E., Abscess of Cerebellum following Disease of Ear ..	303	Lymphangioma, by L. E. Barnett, F.R.C.S. ..	297	Murray-Aynsley, J. H., M.R.C.S. Eng., Notes on a Year's Midwifery Practice ..	17
Koch's New Tuberculin (Letter) ..	180	MACCORMICK, A., M.D., M.R.C.S., Recurrent Sarcoma of Serratus Magnus ..	295	Murray-Gibbes, M.D., Prescription for Sciatica ..	62
" Tuberculin (Letter) ..	134	Macdonald, R. G., M.D., Gastric Ulcer Caused by Hydatid Cyst ..	348	" Philosophy of Disease IV. ..	63
LABORATORY, Note, Cleaning Canada Balsam from Slides, by C. MacLaurin, M.B. ..	107	Macgowan, E. T., M.B., B.Ch., A Case of Intussusception ..	267	" Cold Air Treatment of Typhoid Fevers (Illustrated) ..	158
" Work Done and Methods Employed at Children's Hospital, by Thos. Borthwick, M.D. ..	58	MacLaurin, C., M.B., Cleaning Canada Balsam from Slides, a Laboratory Note ..	107	NALL, J. F., F.R.C.S., Case of Beri-Beri ..	149
Lambert, Dr. de, Subscription Fund ..	322	McClelland, W. C., B.Sc., M.B., Observations on Widal's Reaction ..	331	Narcotics, Hypnotics, and Analgesics, Use and Abuse of, by R. L. Faithfull, M.D. ..	334
Laparotomy for Perforation of Hollow Viscera, Five Cases, Four Recoveries, by C. P. B. Clubbe, L.R.C.P. Lond., M.R.C.S. Eng. ..	331	MacPherson, J., M.B., Remarkable Case of Fatal Head Injury ..	519	Nash, J.B., M.R.C.S.E., Scheele's Thorax Re-section (Illustrated) ..	485
		Major Operation in a Gale of Wind—Herniotomy plus Laparotomy—Successful, by E. M. Owens, M.D., M.R.C.S. ..	479	Naval and Military Intelligence, 40, 228, 274, 367, 416	
		Maitland, H. L., M.B., Ch.M., Plastic Operation for Restoration of Nose ..	20	Nephro-Lithotomy, Four Cases of, by G. H. Hopkins, F.R.C.S. ..	515
		Malarial Fever in New Zealand (Letter) ..	225	Newcastle Medical Society, Annual Meeting ..	221
		Malignant Ulceration, Invagination of Colon Into Rectum, Due to ..	62	" Sessional Meeting ..	288
		Malignancy, Difficulties in Micro-diagnosis of, by David McE. Officer, M.B. ..	532	New Inventions ..	457
		Manning, F. Norton, M.D., Dinner and Testimonial to ..	32	" (Illustrated), Autometric Stopper, Combined Urinometer and Thermometer ..	505
		" Dinner to ..	77	N.S.W. Medical Benevolent Fund, Annual Meeting ..	176, 249, 360
		Manning, L. L., M.B., Ch.M., Four Cases of Ocular Tumours ..	304	N.S.W. Medical Union, Fifth Annual Meeting ..	174
				N.S.W., Royal Society of (Medical Section) ..	407, 500
				New Zealand Medical Benevolent and Medical Defence Funds ..	452

	Page		Page		Page
Nolan, H. R., M.B., Removal of Large Fatty Tumour from Intestine of a Child—Recovery (Illustrated) ..	145	Post-Influenza Mastoid Suppuration, Running Latent Course, Presenting Symptoms of Trigeminal Neuralgia, by T. K. Hamilton, M.D.	430	Reviews:—Continued—	
North Sydney Medical Association ..	451	Poulton, B., M.D., A Case of Empyema	469	Aphasia and Other Speech Defects, A Treatise on, by H. C. Bastian, M.D.	452
Nose, Plastic Operation for Restoration of by H. L. Maitland, M.B.	20	Presidential Address, by C. P. B. Clubbe, L.R.C.P. Lond.	139	At Dawn and Dusk, by V. J. Daley	417
Nyulasy, A. J., M.R.O.S., Case of Peculiar Low Specific Gravity of Urine, without Renal Disease ..	395	„ Canterbury Section, New Zealand Branch, by J. Irving, M.D.	49	Atlas of Methods of Clinical Investigation with an Epitome of Clinical Diagnosis of Internal Diseases, by I. C. Jakob ..	417
Nyulasy, F. A., M.B. Ch.B., Craniotomy—Subsequent Successful Induction of Premature Labour—Child Incubated ..	347	„ Medical Society, Queensland, by Alex. Francis, M.B.	1	Bladder and Urinary Fever, Inflammation of, by C. M. Moullin, M.D.	460
„ Four Consecutive Cases of Tracheotomy for Laryngeal Diphtheria	428	„ Queensland Medical Society, by R. H. O'Doherty, L.K.Q.C.P.I.	47	Children, About, by S.W. Kelly, M.D.	184
OBITUARY, 40, 89, 136, 182, 274, 320, 368, 416, 458, 507, ..	550	„ South Australian Branch, W. A. Giles, M.B., C.M. Edin.	323	Chlorosis: The Special Anæmia of Young Women, by F. L. Jones, M.D.	236
O'Doherty, E. H., L.K.Q.C.P.I., Presidential Address, Queensland Medical Society ..	47	„ by H. R. Salmon, M.B., Ch.B.	371	Clinical Manual of Mental Diseases, by A. C. Clark, M.D.	462
Ocular Tumours, Four Cases of, by L. S. Manning, M.B., Ch.M.	304	Proceedings of Other Societies—		Conservative Gynaecology and Electro-Therapeutics by G. B. Massey, M.D.	553
Officer, D. M.B., Notes on Three Cases of Peculiar Respiratory Symptoms in the Death of a Congenital Heart Patient ..	25	Barrat District Medical Society, 127, 266, ..	405	Deaf and Dumb and Blind Institution, 36th Annual Report ..	45
„ Difficulties in Micro-diagnosis of Malignancy ..	533	Councillors of N.S.W. Medical Societies, Meeting of the ..	407	Diet, The Book of, by P. E. Musket, L.R.C.P.	226
„ Obstinate Constipation Caused by Enterolithic Deposit around Hair Balls ..	21	Eastern Suburbs Medical Association ..	175, 501	Diphtheria, Epidemic, by A. News-holme, M.D.	509
„ Serum Diagnosis in Children ..	192	Intercolonial Medical Conference of Friendly Societies, Melbourne ..	540	Diphtherie, La, by Drs. H. Barbier and G. Ullmann ..	462
„ Specimen of Ribs from a Case of Infantile Scurvy ..	25	Medical Benevolent Fund of New South Wales ..	176, 177, 360	Diseases of the Nervous System, by C. E. Beevor, M.D.	553
„ To Preserve the Reaction—Serum Diagnosis in Children ..	237	Medical Defence Funds of New Zealand ..	452	Disease, The Diagnosis of, by J. P. Parkinson, M.D.	370
O'Hara, H. M., F.R.C.S.I., Hydatid of Brain—Operation—Recovery ..	57	Medical Defence Association of Victoria ..	127	Diseases in Children, Pocket Formulary for the Treatment of, by L. Freyberger, M.D.	322
Oophorectomy with Vento-fixation of Uterus, Delivery at Term Eight Months After, by E. F. Russell, M.D.	61	Medical Society of Queensland, 30, 76, 130, 230, 313, 381, ..	499	Doctor and Patient, Hint to Both, by Dr. B. Geramy ..	349
Os Uteri, Case of Rigid, Treated by Hot Baths, by P. W. Hislop, M.B.	19	Medical Union, N.S.W.	174	Dwelling-houses, their Sanitary Construction and Arrangements, by W. H. Corfield, M.D.	553
Otago Institute, Dunedin, New Zealand	267	Medical Women's Association, Melbourne ..	359	Electricity, Manual of Practical Medical, by Dawson Turner, M.D.	138
Othematoma, Case of Spontaneous, by T. K. Hamilton, M.D.	442	Newcastle Medical Society ..	221, 366	Epitome of the History of Medicine, by Roswell Park, M.D.	551
Ovarian Tumour, Secondary Laparotomy for ..	108	North Sydney Medical Association	451	Ethnological Studies amongst N.W. Central Queensland Aborigines, by W. B. Roth, M.R.C.S.	177
Owens, E. M., M.D., M.R.C.S., Successful Major Operation in a Gale of Wind—Herniotomy Plus Laparotomy ..	479	Otago Institute, Dunedin ..	267	Eye, Practical Guide to the Examination of the, by S. Snell, F.R.C.S. Edin.	460
PAIRMAN, T. Wyll, L.R.C.P., Decapitation by a Primitive Method ..	399	Royal Society of N.S.W., Medical Section ..	460, 407, 500	First Aid to the Injured, by Dr. F. Esmarich ..	553
„ Treatment of Diphtheria ..	526	Royal Society of Tasmania, Medical Section, 174, 267, 313, 360, 407, 451, ..	499	Gall-bladder and Bile Ducts, Diseases of, by A. M. Robson, F.R.C.S.	177
„ Unique Case of Maternal Impression	538	Sydney and Suburban Provident Medical Association ..	500	Gynaecology, Atlas and Essentials of, by Dr. O. Schaeffer ..	138
Palate, Absence of Soft, with Cleft Tongue, by W. M. Hesham, M.R.C.S.	146	Western Suburbs Medical Association ..	31, 221	Heart Disease with reference to Prognosis and Treatment, by Sir Wm. H. Broadbent, Bart., M.D.	551
Pathological Specimens, by Professor Watson, ..	169, 381, 539	Prostatectomy, Four Cases of, by H. V. C. Hinder, M.B. (Illustrated) ..	234	Human Falls, Follies, Fallacies, Fallibilities, &c., by Samuel T. Knaggs, M.D.	226
Pemphigus Contagiosus Tropicus, by Rev. H. Finlay, M.D.	114	„ Notes on a Case, by E. G. Craig, M.B.	237	Hygiene and Public Health, by L. Parkes, M.D.	184
People's Prudential Benefit Society, List of Medical Officers and Chemists, 20, 49, 120, 168, 191, 234, 281, 336, 381, 451, ..	502	Public Health ..	37, 53, 134, 180, 228, 272, 319, 413, 458, 506, ..	Hygiene, Outline of Rural, by Harvey B. Ashore, M.D.	276
Perinephritic and Subdiaphragmatic Abscesses, by S. J. Richards, M.D., Ch.M.	300	Pulse, Notes on the Slow Following Diphtheria—Case of Very Slow Pulse, by W. F. Litchfield, M.B., Ch.M.	55	Intussusception, Some Points in the Anatomy, Pathology and Surgery of, by D'Arcy Power, M.B., F.R.C.S.	407
Pharmacy Notes ..	361, 456	Purpura Hæmorrhagica, Case of, by G. H. Skinner, L.R.C.P.	397	La Grippe, by Dr. L. Galliard ..	417
Pharmacopœia, New British, by R. Guthrie, M.B.	493	„ Contribution to the Pathology of, by J. Mason, M.D.	203	Latin for Students of Medicine and Pharmacy, Elements of, by G. D. Crothers, A.M., M.D.	276
Philosophy of Disease, IV., by J. Murray-Gibbes ..	63	Puerperal Eclampsia, Pathogenesis and Treatment of, with Cases, by G. Gordon Stuart, L.R.C.P.	520	Lexique-formulaire des Nouveaux Médicales et Biologiques, par Prof. P. Sefert ..	332
Phonograph in Medicine, by R. S. Rogers, M.A., M.D.	288	Puerperal Infection Treated by Anti-streptococcus Serum by G. Cascadan, L.R.C.P.	219	Malaria, Sierra Leone, in connection with Meteorological Conditions at, by Surgeon-Major E. M. Wilson ..	46
Pharynx, Ulceration of in Hereditary Syphilis, by T. K. Hamilton, M.D.	168	„ Septicæmia, Fatal Case of Acute Treated with Anti-streptococcus Serum, by T. J. Henry, F.R.C.S.	201	Mastoid Abscesses and their Treatment, by A. Broca, M.D., and F. Lubet-Barbon ..	44
Phthisis, Acute Pneumonic, by T. L. Anderson, M.B.	121	„ Septicæmia Successfully Treated by Hypodermic Injection of Saline Solution, by G. R. Eakins, M.D.	243	Maternal Syphilis, by J. A. Shaw-Mackenzie, M.D.	460
Pigmentation of Conjunctiva, S. H. Huxley, F.R.C.S.	444	QUAIFE, F. H., M.D., Interesting Case of Gastric Ulcer ..	281	Medical Annual and Practitioner's Index ..	225
Pityriasis Rubra, by R. E. Harold, M.B., Ch.M. Edin.	352	Queensland Medical Society, Annual Meeting ..	31	Medicine, System of, by many writers, edited by T. C. Allbutt, M.D., F.R.C.P.	461
Pleurisy with Effusion, A Case of Quiet, by A. B. Carvoso, M.B., C.M.	248	„ General Meetings ..	30, 76, 130, 220, 313, 361, ..	Medicine, Lectures on the Action of, by T. Lauder Brunton, M.D.	417
Pneumonia (croupous) Amphoric Respiration During the Course of, by E. Hirschfeld, M.D.	64	RAMSAY, C. J., M.B., Typhoid Fever with Hemorrhage—Intravenous Injection of Saline Solution—Recovery	526	Medicine, Text-book on the Practice of, by J. M. Anders, M.D.	370
Poisoning by Bitter Almonds, Death from, by H. Horrocks, M.D., B.Sc.	352	Rectum, Extreme Prolapsus of, by T. Flascchi, M.D.	474		
Poisoning by Carbolic Acid ..	326	Recovery of Medical Fees in New South Wales ..	275		
Pollen, H., M.D., Influenza ..	289	Reviews:—			
		Air, Food, and Exercise, by A. Rabagliati, M.D.	277		
		Annual and Analytical Cyclopædia of Practical Medicine, by C. E. Sajous, M.D., and One Hundred Associate Editors ..	321		

Page	Page	Page
Reviews—Continued:—	SALMON, H. R., M.B., Ch.B., Presidential Address, Ballarat...	Tasmania—
Medicine and Surgery, American Year-Book of, G. M. Gould, M.D. 314	Salpingo-ophorectomies, First Series of Fifty Cases of, by E. F. Ross, M.D. 514	Annual Report Board of Health .. 418
Nose and Pharynx, Handbook of Diseases of the, J. B. Ball, M.D. 137	Sarcoma of Kidney—Nephrectomy—Subsequent Induration—Simulating Recurrence—Recovery, by D. Hardie, M.D. 296	Royal Society of .. 174, 267, 407, 481
Obstetric Practice, Manual of, for Students and Practitioners, by Prof. A. Dührssen, M.D. 43	„ Recurrent, of Serratus Magnus, by A. MacCormick, M.D., M.R.C.S. 296	Royal Society, Medical Section of .. 499
Orthopædic Surgery, by J. E. Moore, M.D. 461	„ Round-celled, Growing on Site of Abscess, by A. H. Clarke, M.R.C.S. 302	Donations to Medico-Charitable Institutions .. 416
Pathological Technique, by F. B. Mallory, M.D., and J. H. Wright, M.D. 509	Sawkins, F. J. T., M.B., Ch.M., Notes on Cystic Kidneys 20	Taylor, Hon. W. F., M.D., Chloroform Syncope .. 384
Pharmacopœia, Extra, by W. Martindale, F.L.S., F.C.S. 369	Solent's, Professor, Theory (Letter) 133	Thompson, J. L., M.B., Ch.W., Folie à Deux 327
Pharmacopœia, British, 1898 321	Solatica, Prescription for, by J. Murray Gibbs, M.D. 62	Thorax Re-Section Schede's, by J. E. Nash, M.R.C.S.E. (Illustrated) .. 485
Practice of Massage, Its Physiological and Therapeutic Uses, by A. S. Eccles, M.B. 553	Scurvy, Infantile, Clinical Notes on, by A. Money, M.D. 288	Thuring, E. T., F.R.C.S. Eng., Cancer of Uterus 340
Respiratory Exercises in the Treatment of Disease, by Harry Campbell, M.D., B.S. Lond., F.R.C.P. Lond. 354	„ Infantile, Clinical Note on, by W. H. O'ragh, M.R.C.S. 283	Thymus Gland, Hypertrophy of, Causing Fatal Pressure Symptoms, by G. F. Dixon, M.B. 520
Rheumatism and Its Treatment by Use of the Percussor-punctator, by J. B. James, M.R.C.S. Eng. 44	„ Infantile, Specimen of Ribs, from a Case of, by D. Officer, M.B. 25	Thyroid, Abscess of, Complicating Pleurisy .. 111
Ringworm and Alopecia Areata, their Pathology, Diagnosis and Treatment, by H. Alder Smith, M.B. Lond., F.R.C.S. 44	Serratus Magnus, Recurrent Sarcoma of the 296	Todd, C. E., M.D., Borax in Cases of Epilepsy .. 294
Ringworm in the Light of Recent Research, by Malcolm Morris 511	Serum Antistreptococci for Puerperal Infection 314, 349	Tongue, Cleft, absence of Soft Palate, by W. M. Heleham, M.R.C.S. 146
Roentgen Ray, Archives of, Edited W. S. Hedley, M.D., and S. Rowland, M.R.C.S. 46	Serum Diagnosis in Children, by D. M. Officer, M.B. 192	Tongue, Removal of Left Half of, for Epithelioma—Ligature of Lingual Artery—by T. G. Davy, M.D. 148
Roentgen Rays in Medical Work, by D. Walsh, M.D. 321	„ in Children—To Preserve the Reaction, by D. M. Officer, M.B. 237	Tracheotomy for Laryngeal Diphtheria, Four Consecutive Cases of, by F. A. Nyulasy, M.B. 428
Royal Academy of Medicine in Ireland, Transactions of, 1897, Edited by J. B. Story, M.B. 276	Skinner, G. H., L.R.C.P., Case of Purpura Hemorrhagica 397	Trevor, Jas. E., M.R.C.S. Eng., Cases of Amputation at Shoulder Joint and Supra-pubic Lithotomy Presenting Unusual Features 349
Spinal Cord, by Noble Smith, F.R.C.S. Ed. 277	Smallpox and Vaccination, Brief History of, in New South Wales, by G. Lane Mullins, M.D. 147	Truss, New, for Inguinal and Femoral Hernia (Letter) 131
Stomach, Diseases of the, by J. C. Hemmeter, M.D. 509	Smith, W. Beattie, F.R.C.S., Folie à Deux Smyth, T. E., M.D., Case of Invagination of Colon into Rectum, due to Malignant Ulceration 62	Tuberculosis and Public Health, by G. Lane Mullins, M.D. 9
Surgical Complications and Sequels of Typhoid Fever, by Wm. W. Keen, M.D. 552	Spencer, Walter, M.D., Short Extracts from Current Foreign Medical Literature .. 72, 121, 221, 501	„ Discussion on .. 264
Surgical Diagnosis and Treatment, for Practitioners and Students, by J. W. Macdonald, M.D. 461	Splenectomy for Hypertrophy of Spleen, by H. C. Garde, F.R.C.S. 434	„ How the Paris Municipality Fights it, by E. Conner 180
Surgery, Manual of Operative, by H. J. Waring, M.B., B.Sc. 418	Springthorpe, J. W., M.D., Albuminuria from a Life Assurance Point of View 419	„ of Psoriasis and Skin, H. Lawrence, L.R.C.P. 214
Surgery, Manual of, for Students and Practitioners, by W. Ross, M.B., and A. Carless 417	„ The Student and his Work 91	Tumours, Four Cases of Ocular 304
Tallerman Treatment by Superheated Dry Air in Rheumatism, Gout, Rheumatic Arthritis, Stiff and Painful Joints, by A. Shadwell, M.B. 369	„ Notes on Typhoid and the Widal Reaction 196	Tumour, Large Fatty, Removal from the Large Intestine of a Child, by H. Russell Nolan, M.B. (Illustrated) 148
Therapeutics, Handbook of, by S. Binger, M.D. 322	„ Four Round Worms Passed During Attack of Typhoid 214	Turner, A. Jefferis, M.D., A Rare Form of Hepatic Cirrhosis 94
Tropical Diseases, by P. Manson, M.D. 510	Sprott, Gregory, M.D., D.P.H., Cause and Prevention of Typhoid Fever, re Drainage of Hobart 435	„ Tabes Dorsalis, Affecting Chiefly Upper Limbs—Gastric Crises—Epileptiform Seizures following Injection of Morphia 463
Vaccination, Lectures on the Theory and Practice of, by R. Cory, M.D. 369	Staphylococcus, Two Cases of, by T. K. Hamilton, M.D., F.R.C.S.I. 260	Typhoid and Widal Reaction, by J. W. Springthorpe, M.D. 196
Walker, Thomas, Convalescent Hospital 45	Statistics of the Australasian Colonies 230	Typhoid Fever, Cold Air Treatment of, by J. Murray-Gibbes, M.D. (Illustrated) 158
Women, Diseases of, Clinical Guide to Diagnosis and Treatment, by G. E. Herman, M.B. 277	Stawell, R. R., M.D., Notes and Pathology and Treatment of Acute Bronchitis and Broncho-pneumonia in Young Children 388	„ Diagnostic Signs of, by A. V. M. Anderson, M.D. 250
Women, Diseases of, by J. O. Webster, M.D. 370	Stethoscope, The (Illustrated) 177	„ Cause and Prevention of, re Drainage Scheme, Hobart, by Gregory Sprott, M.D., D.P.H. 435
Women, Text-book Diseases of, by C. B. Penrose, M.D. 277	Stevens, W. E., M.R.C.S., Notes on an Outbreak of Diphtheria in a Country District 426	„ Cold Pack and Bath in the Treatment of, by C. Joyce, M.B. 396
Richards, S. J., M.B., Perinephritic and Sub-diaphragmatic Abscess 300	Stokes, E. S., M.B., Peculiar Cutaneous Deformity following Extensive Suppuration in Infancy (Illustrated) 396	„ with Hemorrhage—Intravenous Injection of Normal Saline Solution—Recovery, by C. J. Ramsay, M.B. 526
Robertson, W. N., M.B., O.M., An Obscure Abdominal Case 243	Stretcher for Applying Plaster of Paris to Fractures of Femur, by L. H. L. Harris, M.B., Ch.M. (Illustrated) 344	„ Complicated with Hemorrhage and Collapse, treated by Transfusion of Normal Saline Solution—Recovery, by F. J. Drake, M.B. 528
Rogers, R. S., M.A., M.D., The Phonograph in Medicine 288	Student, The, and His Work, by J. W. Springthorpe, M.D. 91	ULCER, Gastric, Perforating—Operation—Pneumonia—Recovery 477
Ross, E. F., M.D., Delivery at Term Eight Months After Removal of Both Tubes and Ovaries, with Ventrifixation of Uterus 61	Stuart, G. Gordon, L.R.C.P., Pathogenesis and Treatment of Puerperal Eclampsia, with Cases 320	University and Hospital Intelligence, 33, 86, 135, 181, 227, 273, 320, 367, 414, 488, 506, 549
„ First Series of Fifty Salpingo-ophorectomies 514	Sub-diaphragmatic and Perinephritic Abscess 300	Urethroscope, Use of, by P. C. Fenwick, M.B. 218
Royal Society of New South Wales, Medical Section .. 369, 407, 500	Subphrenic Abscess, Case of, by R. H. Marten, M.B., B.C., Canb. 346	Urine, Case of Peculiarly Low Specific Gravity of, Without Renal Disease, by A. J. Nyulasy, M.R.C.S. 295
„ of Tasmania .. 267, 313	Swift, H., M.D., Foreign Bodies in the Air Passages 172	Uterus, Cancer of the .. 340
„ of Tasmania, Medical Section 369	Sydney and Suburban Provident Medical Association, Annual Meeting 306	„ Fibro-myoma of .. 337
Russell, E. F., M.D., Oophorectomy, Case of 61	Syphilis and Epithelioma of Tongue, by A. L. Kenny, M.B. 531	VACCINATION, Royal Commission on, in Germany 37
	TABES DORSALIS, Affecting Chiefly Upper Limbs—Gastric Crises—Epileptiform Seizures following Injection of Morphia, by A. Jefferis Turner, M.D. 463	Vance, W. B., M.B., Ch.B., Hydatid of Brain—Operation—Recovery 87

	Page		Page		Page
Vercro, J. O., M.D., Foreign Bodies in the		Western Suburbs Medical Association,		Wigg, A. E., M.D., Foreign Bodies in Air	
Air Passages	209	Sydney	31	Passages	171
„ Pelvic Hydatid Removed by		„ Annual Meeting	221	Wilson, T. A., M.B., The Etiology of In-	
Perineal Incision	518	Wheeler, J. A., M.B., B.S., Fatal Illness,		fection	283
Vital Statistics, 38, 84, 135, 180, 227, 272,		Apparently from Leucomaine Poison-		Wolfhagen, J. E., M.B., Some Unusual	
319, 367, 414, 454, 508, 548		ing	30	Complications After Laparotomy ..	398
Vomiting, Uncontrollable, from Child-		Widal's Reaction as a Test for Typhoid		Worms, Four Round, Passed During At-	
hood, Producing Gastric Ulcer.—Ab-		Fever, by S. Jamieson, B.A., M.B. .	381	tack of Typhoid, J. W. Springthorpe,	
dominal Section—Cure, by G. de Olive-		„ Observations on, by W. C. McClelland,		M.D.	214
Lowe, L.R.C.P.	240	B.Sc., M.B., and J. L. T. Isbister,			
WATSON, Prof. A., F.R.C.S.E., Patho-		B.Sc., M.B.	331		
logical Specimens 169, 261, 362, 441, 539					



ORIGINAL ARTICLES

PRESIDENTIAL ADDRESS.

BY ALEXANDER FRANCIS, B.A., M.B., B.C.,
CANTAB, M.R.C.S. ENG., BRISBANE.
'DELIVERED BEFORE THE MEDICAL SOCIETY OF
QUEENSLAND, 4TH JANUARY, 1898.

GENTLEMEN,—It is with feelings of great pleasure that I am able, and pride that it is my province, to congratulate this Society upon the completion of another successful year; successful in every way. Our numbers have increased in spite of the loss of several members from various causes, and the balance-sheet, thanks to our indefatigable treasurer and secretary, shows a more than corresponding increase in our income, which leaves us with a substantial credit, although we have during the year made many valuable additions to our library. The steady growth of the library is very strong evidence of our continued prosperity. By keeping it ever in mind, we have, without at any time overtaxing our resources, now got together a collection of books of which we may with justice feel distinctly proud, and I trust that this policy will ever continue; for, after all, the library is the most lasting memorial of our good work and prosperity; especially valuable in this colony, removed as we are from the opportunity of observing at first hand the work of eminent men in large centres. Very successful too, has been the actual work of the year. Some of the papers read have been more than usually practical and useful, as well as scientific. I should like especially to mention Dr. Turner's paper on the Serum Diagnosis of Typhoid Fever. I feel that the thanks of the whole profession here are due to him for his valuable work in this direction. Like all his other work, he has done it thoroughly, and brought his results to a successful and practical issue, thereby conferring a benefit upon the whole community. Without being invidious, I should like also to mention, on account of their practical utility, Dr. Hardie's paper on Phthisis, and his Demonstration, by the aid of lantern slides, of the usefulness of X rays in the treatment of fractures; and also the papers of Drs. Gibson, Turner, and Green, on Lead Poisoning. I cannot help feeling, and I am convinced that everyone will agree with me, that it is a grievous pity that the proceedings of the Society are not annually collected and bound. I am fully aware that the papers are printed in *The Australasian Medical Gazette*, but having the

the *Gazette* is a very different thing from having them collected into one volume. I know that the expense is the trouble, but I believe that that would not be great, and I contend that it would be well incurred, if each month a number of reprints were obtained from the *A. M. Gazette* Office, and bound at the end of the year. If necessary a small charge could then be made for the Proceedings. In any case, I consider that one such copy should be made each year, from the files of the *Gazette*, if necessary, to keep in the Archives of the Society.

The one sad spot in the retrospect is the deaths of Dr. C. R. Woodward, M.R.C.S. Eng., L.R.C.P. Lond., of Toowoomba, and Dr. J. Mullen, L.R.C.S.I., and Dr. Hugh Bell, F.R.C.S. Eng., M.D. Lond., of Brisbane. Dr. Woodward's death is particularly sad; cut off as he has been, in the prime of life, a few weeks after his marriage. Dr. Mullen and Dr. Bell were among the pioneers of the healing art in Brisbane. When we realize what were the conditions in the early days, it is not easy for us to sufficiently respect and admire the good work they did. With our antiseptics, our antitoxins, alkaloids, and better tools of trade generally, we are apt to forget the debt we owe to the pioneers on whose foundations we are now working.

In seeking a subject on which to speak to-night, my chief object was to find one that had a general interest—one that came within the limits of practical medicine, and at the same time one of which I had some slight personal experience. Strange as it may seem, I know of none that so thoroughly fulfils these conditions as Adenoid Vegetations. I feel, however, as if some apology were needed for introducing such a subject. So much has been heard of them during late years, that the very name has an almost nauseating effect on many men. Still for that reason I wish the more to speak of them, for I am convinced that it is the want of their better acquaintance that brings them into disrepute. Instead of their being consigned to the pigeon-hole labelled "Specialist," the day is not far distant, when they will be recognised by everyone as the most common and important disease of childhood. The more experience I get of them, the more strongly do I feel that no single affection in the whole domain of medicine and surgery has so far-reaching and general effect on the public health—nay, or the development of a nation—as these innocent little over-growths. I am well aware that in all subjects that are

popularly supposed to belong to the specialist there is a danger of exaggeration, and of such undue importance being placed upon limited portions of the body, that the pendulum of public opinion is apt to rebound and bring the whole to ridicule. For instance, it is seriously claimed by some that cauterization of appropriate intra-nasal areas will cure every real and imaginary ill that flesh is heir to, from tinnitus to stomach-ache and dysmenorrhœa. Notwithstanding this, "specialism" has many advantages, and before long the work here will be divided up, for the medical profession and the public will learn that it is not to the advantage of either for one man to be a specialist in all diseases. Not the smallest, however, of the disadvantages of this division of labour, is the danger of a disease being, as it were, appropriated by one section; and so the good to be derived from its treatment becoming general, is diminished. Very many nowadays, I know, recognise the full importance of adenoids, and I would not to-night run the risk of imposing upon your indulgence, were I not being constantly struck by the fact that there are still many who firmly believe that adenoids are simply a fad of the specialist. It must be distressing to anyone who has seen the extraordinary amount of good derived from their removal, to hear from practitioners of some standing, that the operation is simply a device for extorting money from patients, and that it is a present-day fashion, soon to die out; or to see a child, as I frequently have done, with a purulent otorrhœa of many years' duration, whose parents have been cautioned by medical men not to have the ears meddled with on any account, and told that the trouble will clear up when the child reaches the age of 14 years, if a sufficient quantity of cod liver oil and iron wine be taken in the meantime.

In order to show what I may call the versatility of adenoids, and justify their claim to being considered the most important disease of childhood, I wish now to briefly mention some of the various affections on which I have personally found they have at least a direct bearing:—

I. Diseases of the Ears.

I feel that it is superfluous for me to say much of the connection between adenoids and diseases of the ear. When we consider that at least 80 per cent. of all cases of deafness are due to adenoids, and that by their removal deafness, however complete, in children up to the age of 14 or 15 years can, with hardly an exception, be not only relieved, but promptly

and permanently cured; and when we see a purulent otorrhœa in a child, that has successfully resisted syringing of antiseptic lotions, boric acid powder, and cod liver oil for many years, clear up completely within a week after the removal of the growths, one surely need say little to demonstrate their paramount importance. That these are not exceptional cases I am sure everyone who has had dealings with adenoids can testify. Even I could bring forward numbers of such cases, with barely sufficient exceptions of failures to prove the rule—from the emaciated infant of 18 months, whose ears had been discharging fetid pus during half his life-time, and who, a fortnight after the removal of the growths, had sound drums, and would turn his head to listen when a watch was brought, unseen by him, within a yard of the back of his head, to the girl who had persevered faithfully with the cod liver oil treatment for seven years, but who finally thought some more active treatment necessary when she had been sent home from school on account of her deafness and the offensive smell from her ears, but who returned to school ten days after the operation without discharge, and with hearing practically restored. Again, when one sees in the great majority of the adults, between the ages of 20 and 35 years, who consult one on account of deafness, the dried remains of adenoids, and knows that it is then too late for treatment to have much effect, one keenly feels the sadness that the adenoids have had their way and come off victorious. There is one point to which I should like to draw attention. In every case of deafness that I have seen which has been attributed to scarlet fever, measles, or diphtheria I have found adenoids or their remains, and I believe it is reasonable to suppose that it is only in cases where adenoids exist that these diseases have such a direful effect upon the ears.

II. Broncho-pneumonia, Bronchitis, and "Colds."

How often do we not see children, whose mothers tell us that they catch cold on the slightest provocation, or frequently suffer from bronchitis, and even "inflammation of the lungs?" I do not wish to infer that all colds and bronchitis are due to adenoids, but I do assert, and assert with assurance, that the presence of adenoids is responsible for the vast majority of those cases which present an unusual susceptibility to catarrhal affections. My feeling of assurance is based on the fact that I have not met with a case of repeated colds where adenoids were not present, nor

seen a case where removal of the growths did not effect a complete cure of this susceptibility. As an example, about 12 months ago I removed adenoids from a boy for marked deafness. Some time later his mother brought me a younger son, in the hope, as she expressed it, that he too, had adenoids, for she had found that not only had the deafness disappeared in the elder boy, but also that he had improved so much in every other way that she hoped the same good might be effected in her other son by the same means. He had just finished his seventh bottle of cod liver oil and bynosphosphates, but in spite of that, and all possible care, did not thrive, but invariably caught cold if out of doors after sundown, and about once a month was completely laid up with an attack of bronchitis. On examination I found he had some adenoids, although there was no history of mouth-breathing, nor any of the ordinary outward signs. Some months later he contracted, while camping out, his first, and I believe his last, cold since the operation. Another not uncommon condition is that in which a child seems perfectly well and free from cold during the day, but with bed-time a barking, reflex cough comes on, which in many cases lasts more or less the whole night. This, I believe, is almost invariably due to adenoids, for it disappears with their removal. There is one point in this connection I think worthy of notice. I have found that it is not in the confirmed mouth-breathers, whose post-nasal space is completely filled with growths, that this susceptibility is most often met with, but in those cases where one would not suspect the presence of adenoids from any outward appearance or symptom.

III. *Convulsions.*

I feel that I am now treading on less certain ground, and although I believe that this is a very important branch of my subject, I have not yet had sufficient cases to confirm my beliefs. I have had enough experience, however, to show that it is worthy of further enquiry.

About four years ago a boy, aged $4\frac{1}{2}$ years, was brought to me, suffering from fits. For some time previously he had been under treatment for epilepsy, and was taking large doses of bromide, without avail, as the seizures were increasing in frequency. When I saw him he was having three or four each week. I stopped the bromide, and sought some cause for the irritation in the boy's general health. As, however, circumcision, of which he was badly in need, and a carefully-regulated diet, did not help him, I removed his adenoids. The same night he had two fits. After that, for a few

weeks, he occasionally had what his father called "turns," wherein he would stop when walking, look dazed for a moment, but would not fall nor lose consciousness. These, too, soon disappeared.

Another even more striking case was that of a boy, aged seven years, who, when I first saw him in October, 1896, was also under bromide treatment for epilepsy. His history, briefly, was that he was perfectly healthy until a month previously, when he developed what would correspond to attacks of *petit mal*. These quickly increased in severity, and during the last fortnight he rarely passed an hour during the day without a fit, and had three or four during sleep each night. The frequency was still increasing, and during the 24 hours before I saw him he had as many as 30 seizures. The disease had all the appearance of true epilepsy. He lost consciousness during the attacks, and had bitten his tongue. The boy's intellect was rapidly becoming dulled, and he had a dazed, vacant expression in his eyes. The extraordinary frequency of the fits suggested to me that there must be some very active exciting cause, and, remembering my former case, although there was nothing in his history or appearance to suggest adenoids, the passing of my finger into his post-nasal space disclosed their presence, and at the same time produced the worst fit that he had been known to experience. This in itself was a most hopeful sign. At the time of the operation he had one fit as I entered the room, another when placed upon the table and yet another before he was under the influence of chloroform. I found that he had not many growths, but they were unusually tough for a child of his age. The adenoids were removed on 23rd October, 1896. The following day the interval between the fits was about two hours. On the 25th there was a marked decrease in the severity and frequency of the attacks. On 26th he had only two slight fits. On 30th he had one fit during the night. For a few days subsequently he had occasional slight "turns," as they were described in this case also. From that time he has had no return of the fits in any form. He is now a strong, robust lad, with more than the ordinary amount of intelligence. I have had two other somewhat similar cases in children with equally happy results. I think it right to mention, however, that I have had one case in which no permanent benefit has resulted from the operation. He is a boy aged 10 years, who for the last seven years has been subject to fits, usually having eight or nine each night, with occasional

attacks by day. He is an imbecile, unable to speak, feed himself, or even sit upright. For some time after the operation, which I performed last year, the number of fits markedly decreased, and he was able to call his brothers and sisters by name. He has, however, relapsed. But this I do not consider a fair test, as there was little hope of success where the disease had been so long established. I am aware that any operation will, at times, cause a cessation of epileptiform seizures, but in each of the above cases, except the last mentioned, the relief has been so prompt and complete, and the length of time that has elapsed since the operation so great, that I think one is justified in ascribing the credit to the removal of the adenoids. Another class of cases where I believe adenoids have more influence than is generally supposed, is convulsions in infants. I have only seen two cases of such convulsions since this thought struck me, but in each of these, adenoids were present, and I have reason to believe played an important part in the causation. In each case the convulsions were preceded by a cold in the head, with sudden obstruction to normal breathing, which points to the fact that the adenoids had become enlarged, and thus more apt to produce the necessary reflex irritation during the nervous excitation of the dentition period. That there was no further sign of convulsions after the removal of the adenoids I know proves little or nothing, because such convulsions very frequently do not recur; although some evidence in favour of their influence can be derived from the fact that another child, in the same family as the first case, was similarly affected at the same age, some years previously. The convulsions came on with a cold, on three different occasions; on the last of which the child died, although he received the best treatment available at the time. These cases, I consider, prove the advisability of further investigation.

IV. General Development.

I now come to perhaps the most important aspect of the influence of adenoids, because the most common and universally felt, although the one least recognised. The subject, however, is so comprehensive, embracing, as it does, the whole range of a child's growth and development, and I have presumed to such an extent already upon your indulgence, that I cannot do more now than simply mention some of the results which are to be looked for from the removal of the growths. The improvement met with may be roughly divided into physical and mental. The *physical* would need no words of explanation, were I able to show you here two

brothers, from the younger of whom adenoids had been removed 12 months previously. I know several such examples, and in each the younger boy is now a head and shoulders taller than his elder brother, with corresponding superiority in every respect as regards health and development, although previously he had been looked upon as the sickly member of the family. Improvement is often found in many unexpected forms, notably in the disappearance of capricious appetite, dyspeptic troubles, and anæmia, also of the laterally contracted chest, with its subsequent train of lung troubles.

Just as striking in many cases is the *mental* improvement. Guye's term, *Aprosexia*, is employed to describe the mental ineptitude met with in some sufferers from adenoids, and it is by no means an uncommon symptom. The child is backward at school, irritable, and listless, preferring to lie about and do nothing to joining in games with other children. The immediate improvement of this condition is one of the most noticeable results of the removal of adenoids, especially from the point of view of the parents, who frequently ascribe the subsequent winning of prizes and scholarships to the operation.

V. Miscellaneous.

Dr. Lockhart Gibson first drew my attention to the fact that nocturnal enuresis ceased after removal of adenoids, and, acting on this advice, I have, in several instances, removed adenoids for that complaint alone, invariably with success. Lennox Browne, in the discussion on John Mackenzie's admirable paper on the "Physiological and Pathological Relations between the Nose and the Sexual Apparatus," at the last meeting of the British Medical Association, at Montreal, mentions the fact that cases of the cure of enuresis, by such means, had been freely reported, showing that this mode of treatment has become recognised. In the same discussion both Lennox Browne and Bryson Delavan quote cases of the immediate and permanent cure of masturbation by the removal of adenoids.

Again, several instances could be quoted of the cure of asthma after this operation. About two years ago I saw a small delicate girl of 8 years, whose life was a burden to herself and a source of anxiety to her relations, in that about every three weeks she suffered from an attack of asthma, which was distressing in its severity and duration. Lengthened and extensive treatment by drugs had had little effect even in allaying the

attack. On account of the child's delicate state the parents were not in favor of an operation under chloroform; consequently I removed the growths with cocaine, doing a little only at a time, so as not to hurt or frighten the child. From the first the effect was most beneficial, and during the last 18 months there has been only one slight attack. Dr. Lockhart Gibson has related to me a case where, after the removal of adenoids in a girl of 18 years, menstruation became regularly established, although previously it had been delayed. And after the researches of John Mackenzie, Fliess, and others, the correlation seems reasonable.

The most striking feature, to my mind, in the great procession of children through the streets on the day of the Queen's Jubilee, was the miserable, sickly appearance of the majority of the boys, who had adenoids written in every line of their faces. I say boys, for whether or no adenoids are more common in boys, undoubtedly in them their effects are far more frequently seen. When I can see such a gathering, and at the same time realize what the children would be like without their adenoids, I feel that my previous remark about the influence of these growths on the development of a nation is not altogether a flight of imagination.

Yet let me sound one note of warning as to when an operation is necessary. It is very hard to estimate the relative frequency of adenoids among children. Some time ago I reckoned it at about 1 in 10, but after more experience, and further enquiry, I have come to the conclusion that only about 1 in 10 children has *not* some adenoid thickening at the vault of the pharynx. At the same time comparatively few need operative interference. Rarely a week passes without my easing the mind of some anxious mother, by persuading her that her child is in need of no operation. I have seen several amusing cases of parents hurrying a child down many miles from up-country, in a state of excitement and alarm, lest they should not arrive in time, to have removed, the tumour which some person had told them existed behind the patient's nose; whereas, in reality, the child was in perfect health. To operate in cases of adenoids, where there are no symptoms, either as regards the ears or general health, is, I consider, not only unnecessary, but unjustifiable, a practice to be condemned as much as the indiscriminate cutting of tonsils whenever slightly enlarged. No good object is to be gained by it, and nothing is so likely to bring the operation into disrepute, and so prevent great good from being done in innumerable deserving cases.

In conclusion, I must apologize for the large personal element in these remarks. My excuse is that I have wished to bring before your notice records of actual experience, and so help to draw down adenoids from the realms of theory to the ground of practical usefulness in the work of every practitioner.

Long as I have been already, I cannot stop without expressing my thanks to my colleagues on the Council, and especially to the Hon. Secretary (Dr. A. J. Turner), for their valuable assistance during the past year, and to you all, gentlemen, for your unvarying courtesy and forbearance with my shortcomings, which have taken the whole weight from the duties of this chair.

THE INTRA-PERITONEAL OPERATION FOR ABDOMINAL HYDATIDS BY RUSSELL'S METHOD, WITH NOTES OF FIVE CASES.

BY THOMAS FIASCHI, M.D., CH.D PISA AND FLORENCE, HONORARY SURGEON. SYDNEY HOSPITAL.

READ BEFORE THE N.S.W. BRANCH, B.M.A., ON DECEMBER 17TH, 1897.

In the development of the operative treatment of abdominal hydatids, three stages of progress stand out conspicuously. First is the aspiratory puncture which followed Dieulafoy's invention of the aspirator, and for many years ranked as the best mode of treatment. Second comes the direct incision into the cyst, with attachment of the fibrous portion to the abdominal parietes, extraction of the elastic portion and subsequent drainage. This is the operation introduced by Lindeman in 1871, and is known by the French writers under the odd name of marsupialising the cyst. This operation, during the last decade, has almost completely taken the place of the aspiratory puncture, chiefly on account of the greater certainty of permanent results and radical cures obtainable. However, the disadvantage of a 10-29 per cent. mortality, high in comparison to that of other abdominal operations, and the long and exhausting convalescence that follows, have within the last two or three years caused surgeons to pause and scan the horizon in hope that some safer and quicker method might arise.

The third is the intra peritoneal method, first proposed and carried out in 1891 by Mr. Bond, of Leicester.* In this the abdominal cavity is opened, the hydatid cyst emptied of its liquid, daughter cysts and endocyst, then sponged dry, the edges of the rent in the ectocyst sutured, and this

* "The British Medical Journal," 1891, Vol. I., page 796.

left in the peritoneal cavity free without drainage. Numerous cases operated by this method were recorded by various surgeons, successful as regards rapid convalescence and the formation of a good abdominal scar, but presenting a considerable proportion of cases in which the cysts filled up with serum and even pus, and had to be opened again. Great as the advantages of Mr. Bond's innovation are, the suturing of the cyst adds to the difficulty of the operation, and introduces elements of septic danger with the intraperitoneal suture, and with the possibility of retention of air and exudations in the cyst. To Mr. Hamilton Russell, of Melbourne, is due the merit of having realized what the chief advantage of Bond's method is, and of having discarded its disadvantages. In a paper published in February, 1895,* under the title, "On the Future of the Operative Treatment of Hydatid Disease," he strenuously advocated that in abdominal hydatids, not only should the drainage method be given up, and the cyst not be anchored to the parietes, but that the incision made in the ectocyst for the purpose of removing its contents should be left in the peritoneal cavity unsutured. He supported his suggestion with the following arguments:—"That the profuse serous discharge usually seen in hydatids treated by Lindeman's method is provoked by the drainage, and if this is done away there would be very little serous and even bilious discharge; any that might occur would be poured through the unsutured incision into the general peritoneal cavity, and be rapidly absorbed." For the fulness of these arguments I refer you to his valuable paper; but convincing as they are, I think that many of the surgeons accustomed to operate by Lindeman's method will not be influenced to adopt this bold innovation through the weight of arguments only, and are waiting to know what the results of experience have been.

Dr Charles Ryan published in 1892 notes of one successful case, and other three Australian successful cases have since been recorded.

Having given this method a fair trial, I trust that it may not be tedious to you if I will briefly give you an account of the five cases in which I have adopted it.

CASE I.—A little girl, six years old, a native of Sydney, and who never had been out of Sydney, was admitted in the Sydney Hospital on the 4th September, 1895, with a history of having presented an abdominal swelling since the age of two years. A hard, smooth fluctua-

ting swelling was found in the right hypochondrium and epigastrium, otherwise patient was quite healthy. On the 9th September, 1895, under chloroform, an incision two and a half inches long was made in the middle line, and an hydatid cyst found in the right lobe of liver, to the right of suspensory ligament. This was carefully packed round with sponges, and emptied by incision, as it was full of small daughter cysts, and the aspirating canula was getting blocked by them. The endocyst was easily extracted. Another hydatid cyst was found at the back and to the left of the first, and had to be opened by incision through it. This also was packed with daughter cysts, and these, together with the endocyst, were completely removed. The two ectocysts were then well syringed with tepid boracic lotion, and dried carefully with sponges, paying attention to remove every shred of endocyst left behind. The incision in ectocyst was left unsutured, and the external wound was closed. The usual antiseptic dressings were applied, with special attention to the placing of two folded towels between the dressings and the tails of the many-tailed bandage, for the sake of compressing well the sides of emptied ectocyst, and fixed tightly. The patient got on well with a normal temperature up to the 16th day after the operation, when a small, soft projection, dull on percussion, was noticed under the scar. On the 20th day the temperature suddenly rose to 103 deg., without any other symptoms, and the following day fell down to normal. At the same time the swelling began to subside, and in a few days more it had completely disappeared. Apparently some accumulation of liquid had taken place in the cyst, causing the swelling, and on the twentieth day, the little girl having been laughing a good deal with another child, the fluid must have suddenly emptied in the peritoneal cavity, causing the sudden elevation of temperature. The child was directed to report herself six months after, and Dr. Bowker, who examined her in my absence, found her quite well, and without further trouble from the ectocyst.

CASE II. was a woman of 43, from Ber-rima, in whom we also found a large hydatid cyst full of daughter cysts at various stages of growth. The same complete removal of all shreds of endocyst was carried out. Some bleeding took place on paired edges of incision in adventitia, and some bleeding points had to be ligatured. When all hæmorrhage had completely stopped and cavity of ectocysts had been well sponged out, I closed the external wound, leaving the incision in ectocyst open.

* "Intercolonial Quarterly Journal of Medicine and Surgery," Vol. I., page 317.

Patient for three days complained of great weakness and pain in her back, but made an uninterrupted recovery, her temperature never going higher than 99.6°, and she left the hospital feeling well.

CASE III.—Mr G., *æt.* 28, a patient of Dr. Muskett. For six months before had been suffering from pain in the right side of chest and abdomen, for last two months had noticed a bulging-out of the ribs on the right side. Had also suffered pain, gastric derangement, and was getting weaker and thinner. The right side of thorax measured two inches more than the left, and a smooth globular elastic swelling, movable freely with respiration, could be felt in right hypochondrium. We diagnosed "hydatid cyst in the convex surface of liver," and on the 22nd November, 1896, assisted by Dr. Muskett, and having Dr. J. Adam Dick to administer ether, I operated on him. A longitudinal incision three inches long was first made through the abdominal walls in the upper part of right semilunar line. On passing finger into the abdominal cavity I felt and saw the liver, and felt the globular swelling in it, but could not see the cyst. Evidently it was high up, and had I then aspirated I would have punctured through considerable thickness of liver substance. I thought it better to prolong the incision upwards for three inches over thoracic walls, and excised one inch of the tip of the seventh rib just near its junction with the cartilage, opened the pleural cavity, and, passing the finger in it, felt the diaphragm. This did not present any bulging. I then, through the abdominal wound, passed a pair of straight long-handled forceps, and pushed the diaphragm in the thoracic wound. On the guidance of the forceps I made an incision in the diaphragm one inch long, and through this I was able to feel and see the glistening white surface of the hydatid cyst. This was found to be of a size of an emu egg, a mono-cyst full of yellow greenish fluid without daughter cysts. I emptied it of its liquid and endocyst, syringed out with Boracic Lotion, and thoroughly sponged it out, through the thoracic and diaphragmatic wound. Owing to the suspicious colour of the fluid I did not drop the opened cyst in the abdomen, but struck a middle course. I left the rent in the cyst open, but I attached the edges of it to the edge of the wound in the diaphragm by one silk suture on each side, then stitched up the wound in the diaphragm, leaving only a narrow opening, through which I passed a quarter of an inch of india-rubber tube. This was passed also through parietal wound, which was completely closed up, the edges of

parietal pleura having been sutured to the edges of the small opening in diaphragmatic incision. Patient forty-eight hours afterwards was doing well, his temperature having merely come to 100°, so that I removed the tube on the second day and the wound healed well and rapidly by first intention.

Patient has enjoyed good health until recently, when symptoms pointing to the presence of another hydatid cyst in the liver have revealed themselves. It is not the old ectocyst filled up, but, as frequently occurs even with Lindeman's method, there is another cyst developing close to the old cyst of the first.

CASE IV.—A. A., 58 years old, a resident of Townsville, was admitted into the Sydney Hospital on the 11th April, 1897. This man had first noticed a lump in the epigastric region 28 years ago, which had been steadily growing. Had at times suffered pain in the abdomen, severe enough to double him up, but had never been jaundiced nor had vomiting. During last five months had rapidly got worse, losing two stones in weight. A very large, tense, fluctuating swelling was found, extending from right lumbar region to two inches beyond the middle line, and to the left of this in left hypochondrium other two swellings of the size of cricket balls could be felt. The lower level of this mass extended below umbilical line, and the whole moved freely with respiration.

On the 14th April, 1897, under ether, I made a longitudinal incision, three and a half inches long, just under the tip of right tenth rib. Using the usual precautions, I incised the cyst, and found it to be a very large one, full of daughter cysts varying in size from that of a marble to that of an egg. In seeing them pour out from the opening, presenting different sizes and various hues of colour and transparency, the members of this huge endogenous family reminded one of Browning's verses—

"Grave old plodders, gay young friskers,
Fathers, mothers, uncles, cousins," &c.

The endocyst was completely removed, and the walls of the ectocyst were found thick, and in many points very hard from calcareous infiltration. The syringing with boracic lotion and thorough cleaning out and sponging dry took considerable time, but was done as thoroughly as possible. The incision in the cyst was left unsutured, and the wound in the abdominal wall closed. The usual antiseptic dressing, compressing pads and tight bandage for the purpose of keeping the opposite walls of the ectocyst well together, were carried out. A rapid, and I may say pleasant recovery followed,

the temperature never going to 100°, and after the first day patient remained quite free from pain. In fact, he got on so well, that he was seized with the *prurigo secari*, and two months later he returned to the hospital asking to be operated for an old inguinal hernia. This was done according to Bassini's method, quite successfully, but causing, according to patient's statement, much more after-pain than the abdominal operation.

CASE V.—B. W., a woman, aged 43. Admitted in the Sydney Hospital on the 9th July, 1897, in a marasmatic condition, with peculiar harsh, dry, scaly skin. She had noticed a lump in her left hypochondrium five years ago, and this had been gradually increasing in size. Painless at first, she had two months before admission been seized with acute pain extending over the whole abdomen, and she remained in pain for about a fortnight. Was the mother of thirteen children, and could boast a triplet birth five years ago, of which two of the triplets had lived. On examination we found a tumour occupying almost the whole of the left half of abdomen, movable with respiration, and apparently cystic.

On the 15th July, 1897, under ether, I performed a longitudinal incision, three inches long, in left semilunar line, with middle of incision crossing the umbilical equator. A cyst was found, which, after usual packing round with sponges, was aspirated and incised. We found it to be a sterile cyst, full of clear fluid springing from the lower surface of the spleen. The endocyst was carefully removed, ectocyst syringed out with Boracic lotion, and the inner surface of it well cleaned and dried with sponges. Another and independent cyst of the size of an egg was felt in the lower part of the abdominal cavity, but owing to the bad condition of patient, I did not think it advisable to proceed any further, and closed the wound, leaving the incision in the ectocyst free and unsutured.

Patient made a good recovery, but had more temperature than the other cases. For the first three days she had a rise to 100·6°, and on the fourth day her temperature suddenly went to 101·4°. This alarmed me, but, remembering that it was a visitors' day, I searched her locker, and found a goodly store of biscuits and apples.

The sequestration of these, and the administration of a purge, brought the temperature to normal, and this remained so and ever after.

When I saw her three months later, her condition had greatly improved; the skin looked smooth, and she felt well. Not finding the remaining cyst any larger, I referred her for other six months.

Remarks.—I think that we can fairly conclude from these five cases that the intra-peritoneal treatment of abdominal hydatids by Russell's method is not only possible, but that it can be carried out successfully in all kinds of non-suppurating hydatids, no matter how large or old. I consider the fourth case to have been a most crucial test for this method, as the cyst was large and old, with a thick and calcareous adventitious capsule. The advantages of this method are :—

First.—Rapid and painless recovery, which stands in marked contrast with the tedious convalescence following Lindeman's method. No obstinate, slowly-healing sinuses are left behind; no weak scar remains.

Second.—Rapidity of recovery means less danger of exhaustion, a danger with which one has to reckon in cases of patients much debilitated. I believe from previous painful experience in similar cases, that had the fifth case been operated by Lindeman's method she would have succumbed.

Third.—Less danger of septic infection; because, no matter how vigilant the surgeon may be, a cavity communicating with the air, discharging highly decomposable liquids, and requiring daily dressings, is much easier inguinated by septic germs than a closed wound, which at the end of eight or ten days is practically healed. And in coming to this conclusion I have quite in mind the fact that, in the *Australian Medical Journal* for September, 1895, a case was recorded in which death occurred after Russell's method from acute sepsis, three days after operation, and that a similar case has occurred in our city also. This very serious question cannot be definitely settled until more extended statistics are gathered, but to my mind it is much easier for a surgeon to guard against the introduction of septic organisms during an operation than to have in addition to guard against septic poisoning in daily surgical dressings, many of which are not done by himself, and are quite beyond his control.

I can compare in this point the two methods—Russell's and Lindeman's—to the healing of an amputation wound by first or by second intention. No surgeon would ever prefer the second if it could be possible for him to obtain the first.

Fourth.—Another great advantage of Russell's method is the possibility of treating hydatid cysts of the convex surface of the liver and of the upper surface of the spleen with much greater safety and ease.

The third case, though not completely a

Russell, because the drainage-tube was kept in the cyst for the two first days after operation, is near it enough to reveal what can be obtained in such cases. All surgeons who have had experience of hydatid cysts in the convex surface of the liver agree that these cannot be well cleaned and emptied, unless the opening is made through the thoracic walls. How much better then to drop the adventitia in the abdominal cavity, and to completely close up your diaphragmatic and pleural incisions, than to drain through the pleural cavity. This class of cases seems to me the one that will particularly feel the benefit of Russell's innovation.

The only disadvantage that I can see is the risk of acute septicæmia, which, once developed, might prove rapidly fatal. Such risk no doubt exists, but, in my opinion, it should not act as a deterrent from this mode of treatment, being a risk coming within the number of preventable surgical dangers. The possibility of it merely means increased vigilance on the part of the surgeon in carrying out his operation scrupulously aseptic, and also careful selection of cases, avoiding those in which a septic process is already established.

Whilst admitting that in my practice I have carefully avoided to perform Russell's method in suppurating cases, I have tried even in these to secure the advantages of it by doing away with the drainage tube as soon as I was satisfied that suppuration had stopped. This year I have had in hospital two cases of suppurating abdominal hydatids. These, after having been emptied, I syringed out thoroughly with carbolic lotion, 1 in 40, paying attention to prevent its entrance in the peritoneal cavity, then sponged thoroughly out the adventitious capsule, and attached it to the wound according to Lindeman's method. Finding, however, that in the following three or four days there was no discharge of pus, and no temperature, I removed the drainage tube, and, keeping the abdomen well compressed with suitable pads and a tight bandage, I allowed the wound to heal undrained. Both cases did well and healed rapidly.

In conclusion, if I must give you my advice as to the best rule to succeed in the treatment of abdominal hydatids by Russell's method, I will paraphrase Rossini's opinion as to the three requisites indispensable for a good singer, and tell you that three things are very much required: The first is a sepsis, the second is a sepsis, and the third a sepsis.

On page xxiv., in our advertising columns, will be found an important notice with reference to the notification of infectious diseases in this colony.

TUBERCULOSIS AND THE PUBLIC HEALTH.

BY GEORGE LANE MULLINS, M.A., M.D.,
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TO ST. VINCENT'S HOSPITAL, SYDNEY.

READ IN THE SANITARY SCIENCE AND HYGIENE
SECTION OF THE AUSTRALASIAN ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE, SYDNEY,
JANUARY 7, 1898.

TUBERCULOSIS is the most deadly disease that the world knows in the present generation. In most countries of the habitable globe and in all of the Australasian Colonies it stands at the head of the list of the causes of death.

STATISTICS.

During the past forty years (1857-96) 26,712 deaths from phthisis alone have been registered in the colony of New South Wales. As phthisis accounts for 73·5 per cent. of all the registered deaths from tubercular affections, we may add 26·5 per cent., or 7,078, for other tubercular diseases, and we get the enormous number of 33,790 deaths from tuberculosis.

The following table shows the number of deaths from phthisis in New South Wales during the past forty years, in quinquennial periods, and the annual death-rate from the disease per million inhabitants:—

Period.	—Deaths.—		Annual death-rate per million.	
	M.	F.	M.	F.
*1857-59	536	366	974	895
1860-64	809	683	795	794
1865-69	1,176	736	985	745
1870-74	1,373	953	955	796
1875-79	1,888	1,298	1,096	899
1880-84	2,726	1,788	1,238	987
1885-89	3,172	2,004	1,157	886
1890-94	3,253	1,958	1,024	726
†1895-96	1,265	778	924	657

* 3 years.

† 2 years.

During the years 1885-96, a period of twelve years, there were 17,114 deaths from tubercular diseases in New South Wales. Of these, 12,430 were from phthisis, 2,241 from *tuberculosis mesenterica*, 1,325 from tubercular meningitis, and 1,018 from other forms of tuberculosis. During the same period there were 12,884 deaths from the six chief zymotic diseases, viz., smallpox, measles, scarlet fever, whooping cough, diphtheria, and typhoid fever.

Within the metropolitan area (Sydney and suburbs) there were 4,726 deaths from tubercular diseases, and 2,925 from the above-named zymotic diseases, during the past seven years (1890-96).

We spend immense sums of money every year in the prevention of infectious fevers, yet

we neglect the most deadly disease in the world. Fevers usually attack children, run a short course, protect from subsequent occurrence, and leave their subjects able to work. Tuberculosis, on the other hand, strikes down those in the prime of life, runs a chronic course, and causes permanent incapacity for occupation. Surely the restriction of this terrible disease is one of the most pressing questions in preventive medicine in the present day. That tuberculosis is communicable there can now be no shadow of doubt. Experiments have demonstrated this only too clearly. The communicability of the affection being granted, we are bound to protect the healthy members of the community against the ravages of the disease. To suggest how we may best effect this purpose is the object of this paper to-day.

THE CAUSE OF TUBERCULOSIS.

Tuberculosis is caused by the tubercle bacillus of Koch, which gains an entrance to the body from without. It affects man and many of the domestic animals, such as cattle, horses, pigs, &c. Heredity plays a very unimportant part in the production of the disease, and, although the bacillus has in some instances been found in the fœtus, this mode of infection must be extremely rare. It is the predisposition which is so often confounded with the transmission of the disease. The chief modes of communication are inhalation and ingestion, but the disease may be inoculated. The bacilli may be received from the air by inhalation, and from tuberculous food, such as milk or meat, by ingestion. Probably, in adults, at any rate, inhalation is the chief mode, and next to that ingestion.

THE IDENTITY OF HUMAN AND BOVINE TUBERCULOSIS.

There are some who doubt the identity of human and bovine tuberculosis. But there are on record numerous instances of infection from human beings to lower animals, from one animal to another, and from the lower animals to man. The following are some cases in illustration of these modes of conveyance:—

Tscherning, of Copenhagen, relates the case of a veterinary surgeon who cut his hand when making a post-mortem examination on a tuberculous cow. The wound healed, but a swelling remained which became ulcerated and refused to heal. Eventually the whole mass was removed, and the tubercle bacilli were found under the microscope.

Pfeiffer, of Weimar, reports that in 1885 a veterinary surgeon, 34 years of age, of good constitution, and free from hereditary taint, wounded himself deeply in the thumb of the left hand. The wound healed well, but six

months later a cutaneous tuberculosis was diagnosed at the site of the scar. After the autumn of the following year the patient showed unmistakable signs of pulmonary tuberculosis, his sputum contained tubercle bacilli, and he died two and a half years after having received the wound. A *post-mortem* examination revealed tubercular arthritis of the wounded thumb, and extensive tubercles and cavities in the lungs.

Law, of the Cornell University Agricultural Experiment Station, cites the case of another veterinarian who was wounded in the hand in opening a tuberculous cow, and suffered from a tumefaction of the resulting cicatrix, with distinct tubercle bacilli. The surgical removal of the tumefaction manifestly saved the subject from a generalised tuberculosis.

Williams collected the dust of the ventilating shaft of the Brompton Hospital, and found the characteristic bacilli after five days. Klein found that guinea pigs kept in this ventilating shaft became tubercular. Cornet produced tuberculosis in rabbits by inoculating them with dust from the walls of a consumptive ward.

Cozette, veterinary surgeon at Noyon, France, relates that in a farm at Beauce, an admirably-kept stable contained 24 cows and one bull, all in good condition. Tuberculosis had never before been known in the stable, but in 1886 two of the cows began to cough. They were handed over to the butcher for slaughter, but one was so markedly tuberculous that it had to be condemned. In due course all the cows in the same row were attacked one after the other. They were sent to the slaughter house as soon as they became ill, but in 1892 the tuberculin test showed that of the 20 animals composing the herd seven were tuberculous. All these seven animals belonged to the same row, the 12 in the other row being quite sound; and the autopsies on the seven animals confirmed the diagnosis. An inquiry, instituted for the purpose of discovering the cause of the contamination of the stable, revealed the fact that in 1883, three years before the recognition of the first cases, the farmer had engaged, as cowherd, a man who suffered from pulmonary tuberculosis. This man, who used to cough and expectorate constantly, used to sleep in the stable immediately over the two cows which were the first to fall ill. This cowherd resided here until 1891, having been treated for consumption in the meantime. There can be no doubt that these two cows in question were contaminated by the sputum of this man.

A boy, aged five years, at Amorback, New York, well developed, and of healthy parents

with no tuberculous family history, died from miliary tuberculosis of the lungs and enormously enlarged mesenteric glands. About the same time the family cow, which had been a good milker, was slaughtered and found to be suffering from pulmonary tuberculosis. The boy had been for a long time in the habit of drinking the milk fresh from the cow.

Demme, of Berne, records a case where four infants in the Hopital Jenner, the offspring of healthy parents, with no tuberculous family history, died of intestinal and mesenteric tuberculosis, as the result of drinking the unsterilised milk of tuberculous cows. These were the only cases out of 2,000 treated by Demme in which he was able to eliminate with certainty any other cause for the disease.

Law quotes a case where a strong, healthy boy, of one and a half years, went to an uncle's for a week, and drank the milk of a cow which was shortly afterwards condemned and killed in a state of generalised tuberculosis. In six weeks the child was noticeably falling off, and in three months he died, a mere skeleton, with abdominal tuberculosis.

Gosse, of Geneva, lost a daughter from intestinal and mesenteric tuberculosis. There was no family history of tuberculosis. Suspicion fell upon some of the cows whose milk the girl used to drink fresh from the udder. Four out of the five cows on the estate reacted to tuberculin, and were slaughtered. Two of them showed tubercular disease of the udder.

Brouardel cites a case where five out of 14 young girls living together in a boarding school became consumptive, subsequent to the daily use of milk from a tuberculous cow.

That there is an intimate connection between tubercular diseases in man and animals is plainly shown by the fact that where cattle are few or absent consumption exists in man to a much smaller extent. In the northernmost countries of the world, where reindeer take the place of cattle in the farms, tuberculosis is far less prevalent in man than in those countries where cattle abound. Norway and Sweden, Finland and Lapland, are instances of this. On the other hand, in Italy and in Ireland, where the cattle are kept in the houses, tuberculosis is frequent in both man and the lower animals.

Colorado, U.S.A., is remarkably free from tubercular diseases in human beings, and the reports of the State Veterinarian show that only 2 per cent. of the cattle react to tuberculin. The disease is so rare among Colorado cows as to be almost a curiosity. When it does occur, it is usually either in animals which have had the worst of care as regards over-

crowding, or in imported animals; native animals are entirely immune.

Dr. Charles Creighton goes so far as to say: "I cannot escape from the conviction that the peculiar errors of nutrition in the domesticated bovine species all over the world are the real fountain and source of human tubercle."

The remarkable fall in the death-rate from phthisis in New South Wales since the introduction of the Dairies' Supervision Act of 1886 is, in my opinion, very significant.

TUBERCULOUS MILK.

That tuberculous milk may, and frequently does, cause tuberculosis in human beings is beyond all doubt. The milk containing the tubercle bacilli enters the mouth and passes on to the throat. During the time of its passage, the bacilli may be deposited in the mouth, tonsils, pharynx, or adjacent structures. More bacilli are added every two, three, or four hours, according to the frequency of feeding. These bacilli may be washed further down and into the stomach, or may cause infection in the mouth, etc., or may be inhaled into the lungs. The milk that passes into the stomach may deposit more bacilli, or may continue its journey into the intestine. Strauss and Wurtz* have shown that the bactericidal quality of the gastric secretions is insufficient to destroy the bacillus tuberculosis. Infection may thus arise in the mouth, tonsils, throat, lungs, or intestinal canal from tuberculous milk. The lung infection may be primary from direct inhalation of the bacilli lodged in the mouth, or may be secondary to infection of other parts.

Woodhead† reports that in 127 cases of tuberculosis in children that he examined, tubercular ulceration of the intestine was found in 43; whilst in 100 cases, or nearly 79 per cent. of the whole, the glands connected with the intestinal tract were in some stage or other of tubercular degeneration. He argues that tuberculosis connected with the intestine is of frequent occurrence in children, and that the infection frequently takes place by the alimentary canal. The age at which these tubercular glands were found is very significant. During the first year of life there were 4 cases; from 1 to 2½ years, 33; from 3 to 5½ years, 29; from 6 to 7½ years, 12; from 8 to 10 years, 13; and from 11 to 15 years, 9 cases. In 14 cases these glands only were affected.

* "Arch. de Med. Experim.," 1889, p. 379.

† "Bacteria and their Products. London, 1891," p. 222.

The London milk supply is undoubtedly good and pure, and this is due chiefly to the careful supervision exercised by the medical officers of health, and also by the large dairy companies.

Dr. Arthur Newsholme* describes the means taken to ensure the purity of the milk supplied to the public in London :—

Large dairy companies have been formed, whose supply of milk is based on most minute and vigorous regulations. By their contracts, these companies have the right to inspect the farms and cow-sheds before accepting the milk of any farmer, and can order any necessary measures to be taken. The state of health of any cow can be examined by a veterinary surgeon, and the milk from any animal rejected. He can give instructions as to fodder, the maintenance of cleanliness, and the treatment and cooling of the milk.

To prevent the spread of infectious diseases by milk, the farmer is required in these contracts to call in a doctor, if any person employed in the dairy falls ill. If the disease is infectious, the secretary of the company must be at once informed, who will indicate the measures to be taken. In the event of serious disease, the delivery of milk from the farm is forbidden, but the farmer is paid as if he delivered it. The company send inspectors to see that the necessary measures are taken. Arrangements may be made with the local Medical Officer of Health to obtain information as to each case of infectious disease arising in the neighborhood of a cow-shed or dairy.

Twice a day the milk is brought to London by railway. A sample is taken of each instalment, and its temperature and density are examined.

The vessels in which milk is brought to town are ordinarily sealed and furnished with a tap near the bottom. They are generally of tin, not painted, but always clean and polished.

I may here repeat my protest against the use of ordinary metal taps for milk cans. The thorough purification of such is very difficult, and in the limited time at the disposal of dairy hands for cleansing utensils, is very probably omitted, or is done in a careless manner. The consequence is that some of the milk remains, and contaminates the whole of the contents of the vessel. Removable taps, which could be taken to pieces, cleaned thoroughly, and sterilised, would improve matters. I believe, however, that some of our large dairy companies do use such taps as these.

In Paris the dairies are subject to the following regulations :—They must be well ventilated; the floors must be paved or cemented, so as to be impervious to wet, and must be supplied with a subterranean drain for carrying off refuse water to the sewer; the walls must be faced with marble or tiles, or cemented; all wainscoting must be painted in oil; the dairies must have an abundant supply of water, and the floors and walls must be frequently washed; pigs must not be kept.

In Berlin it is forbidden to sell the milk of diseased animals.

Two years ago the *British Medical Journal* published a report on the milk supply of London. Mr. Sidney Rowland examined twenty-five samples of milk bacteriologically, and found on an average 500,000 bacilli per cubic centimetre. The *Bacillus Coli Communis* was the form found in the greatest abundance, it constituting fully 90 per cent. of all the forms found. Mr. Rowland suggested the following reforms :—

1. That all milking be carried on in the open air, the animals and operators standing on a material which is capable of being thoroughly washed, such as a floor of concrete or cement. Such a floor could be easily laid down in any convenient place which can be found. The site chosen should be removed from the inhabited parts as far as possible, and should be provided with a plentiful water supply.

2. That greater care be expended on the personal cleanliness of the cows. The only too familiar picture of the animal's hindquarters, flanks and side being thickly plastered with mud and faeces is one that should be common no longer. It would not be difficult to carry out this change.

3. That the hands of the milker be thoroughly washed before the operation of milking is commenced, and that after once being washed they be not again employed in handling the cow, otherwise than in the necessary operation of milking. Any such handling should be succeeded by another washing in fresh water before again commencing to milk.

4. That all milk vendors' shops should be kept far cleaner than is often the case at present. That all milk retailing shops should be compelled to provide proper storage accommodation, and that the counters, &c. should be tiled.

With all these suggestions I heartily agree.

Thorough cleanliness of dairy premises, workers, cows and vessels should be rigidly enforced.

All cattle should be tested with tuberculin, and strict isolation of those reacting to the test should be enforced. The public should demand from dairymen a certificate from an expert that the dairy contains no tuberculous animals. No cattle should be admitted to a dairy until they have passed the test. Tuberculosis in man should be declared an infectious disease under section 12 of the Dairies Supervision Act of 1886. No consumptive should be allowed access to dairies or to take part in milk selling. All milk should be sterilised by boiling, or it should be Pasteurised. No cattle should be allowed to enter the colony until they have passed the tuberculin test.

The use of tuberculin is now an established means of diagnosis for tuberculosis in cattle. On this subject I shall not say more, but I may refer you to an excellent paper on the subject by Dr. Ashburton Thompson, which appeared in the *Australasian Medical Gazette* for December, 1897.

* "Public Health, and its Applications," 2nd Ed., p. 116.

Dr. Sims Woodhead* in the course of an address on "The Channels of Infection in Tuberculosis," offers the following remarks :—

There appears to be even now too little attention paid to the question of infection commencing in the alimentary tract. We speak glibly of infection by tuberculous meat and milk, we think of a few cases that have come under our observation, in which one or other of these agents (especially milk) was thought to have played a casual rôle, but that ingesta of various kinds are daily adding to our numbers of cases of tuberculosis is not yet, I am sure, fully realised in this country. How real the danger appears, however, to those who have been engaged in the careful study of the question of tuberculosis for many years in a country where tuberculosis amongst cattle has come to be an important question, not merely with the scientific authorities, but with the farmers themselves, may be gathered from the fact that on many farms in Denmark constant fortnightly inspection of cattle is carried on, on, and from the knowledge gained through this fortnightly inspection it has quite recently been determined by the Danish Government to hand over to their head veterinary adviser, Dr. B. Bang, a considerable sum of money (£3000)—a sum which is to be granted annually for five years—with which it is proposed to carry on a systematic inspection of all cows not previously under observation, to use tuberculin as a diagnostic agent, to kill off the cattle that are undoubtedly affected with tuberculosis, and to keep under observation every animal in which there is any suspicion that the disease exists. It is hoped, in this manner, to stamp out the disease in the present generation, and I am convinced that if this once be thoroughly done, and the inspection be continued, the comparatively trifling amount spent by the Government will prevent a loss to the Danish farmers, and will cause a gain to infant life almost incalculable. If Koch's tuberculin had done far more harm than it ever has done, the saving of human life indirectly, through its efficacy as a diagnostic agent, will be so enormous that the account to the credit side of the balance will have to be reckoned not as hundreds to units, but as thousands. I may appear to be speaking extravagantly, but from what I have seen of the effect of milk from tuberculous udders when given raw, even to comparatively insusceptible animals, I feel no qualms of conscience in making even these apparently exaggerated statements.

TUBERCULOUS MEAT.

The danger to be apprehended from tuberculous meat is not so great as that from the milk of tuberculous cows. Meat being eaten cooked is more likely to have the bacilli it contains destroyed, except in the case of large joints, or when imperfectly cooked. On this subject I cannot do better than refer to the Report of the Royal Commission on Tuberculosis. Dr. Woodhead took "rolls" of meat containing tuberculous matter. With specimens of this meat he noted the temperatures at various depths below the surface during various periods of boiling or roasting, and, at the conclusion of the process, took the central portions and used them for feeding pigs. The results, as expressed in his own language, are as follows :—

In the boiling and roasting experiments, as ordinarily carried out in the kitchen, the temperature, however high it may be near the surface, seldom reaches 60° C. (140° F.) in the centre of a joint, except in the case of joints under 6 lbs. in weight. Ordinary cooking is quite sufficient to destroy any smeared material that remains on the outer surface of the meat, *but it cannot be relied upon in the slightest degree to render innocuous the same smeared material when in the centre of a roll.*

In another place he says :—

Ordinary cooking, such as boiling, and more especially roasting, though quite sufficient to sterilise the surface, and even the substance for a short distance from the surface of a joint, cannot be relied upon to sterilise tubercular material included in the centre of rolls of meat, especially when these are more than 8 lbs. or 4 lbs. weight. The least reliable method of cooking for this purpose is roasting before the fire, next comes roasting in an oven, and then boiling.

I do not intend to go deeply into the vexed question as to whether an animal in which the tubercular lesions are strictly localised should be wholly condemned for food. I am of opinion, though, that in the present state of our knowledge on this subject it is safer to reject the whole carcass. This is now the practice in Sydney, and I can see no reason for altering it.

In France, by an order of the Minister of Agriculture, dated September 28th, 1896, the flesh is to be seized and totally condemned :—

1. When the tuberculous lesions, whatever their importance, are attended with wasting.
2. When there are tubercles in the muscles or in the glands in the muscular tissue.
3. When generalised tuberculosis is present with milary deposits on all the organs, and notably on the spleen.
4. When important tuberculous lesions exist at the same time both on the organs of the chest and of the abdominal cavity.

It must be seized and partially excluded from consumption :—

1. When the tuberculosis is localised either in the thoracic or abdominal cavity.
2. When the tuberculous lesions, even though they exist at the same time both in the thoracic and abdominal cavities, are not extensive.

The seizure in this case only extends to portions of meat (costal or abdominal walls) which are directly in contact with the diseased portion of the pleura or peritoneum.

In every case the tuberculous organs must be destroyed, whatever the extent of the lesion.

In all cases meat that is fairly fat can be handed over to the owner after being sterilised for at least an hour, either in boiling water or in a steam steriliser, but the sterilising must be carried out at an abattoir, under the control of a veterinary surgeon.

These regulations appear to me to be wholly inadequate.

PREVENTION OF TUBERCULOSIS.

In this paper I have avoided the strictly medical aspect of tuberculosis, but I have endeavoured to indicate the line of preventive treatment which might be adopted by the public at large. On the general subject of

* *Lancet*, October 27th, 1891, p. 980.

prevention of the disease the following rules may be laid down :—

Overcrowding should be prevented. This overcrowding may be of two kinds :—(a) A district may consist of a large number of small houses built back to back, and without yard space; the streets may be narrow, or may end in blind alleys; or, (b) in the poorer quarters of towns, a large number of persons may live in small houses, sometimes even whole families, consisting of perhaps seven or eight persons, may inhabit one or two rooms.

Sunlight and fresh air should be allowed free access to all habitations. Sunlight alone is a valuable germicide. The houses should be well ventilated. A broken pane of glass in a badly ventilated house often does more good than harm. The subsoil should be well drained.

All rooms should be well swept while the windows are open. The old-fashioned plan of sprinkling tea leaves on the floor is to be recommended, as it serves to prevent the dust from rising and afterwards settling down in the room. All houses intended for habitation should be inspected by public officers before they are used for residence. Dirty trades should be regulated, and all buildings subjected to periodical sanitary inspection.

Consumptives should be isolated as far as possible. They should spit into small pieces of rag or paper, which can be burned, or into a small spitting cup containing an antiseptic solution, such as carbolic acid or corrosive sublimate. They should sleep in well-aired rooms by themselves, and should not have more communication with the other members of the household than is absolutely necessary. They should not marry.

Consumptive children should not be admitted to boarding schools unless they can have separate rooms for sleeping in, and provision can be made for the destruction of the expectoration.

Consumptive mothers should not nurse their children, nor should phthisical wetnurses be employed.

CLIMATIC TREATMENT.

We cannot allow phthisical patients to enter the wards of our general hospitals for treatment, for we are unable to prevent communication between the consumptive and other patients in these institutions. Experiment has shown that the air which a consumptive breathes becomes charged with the bacilli of tuberculosis; the expectoration, which is usually copious, dries up and leaves the bacilli to mingle with the dust in the room, and cause infection among others. If, then, consumptive

patients occupied the same wards with others in the hospitals, they might communicate the malady to those who are debilitated by disease or accident. The power of resisting disease is at a minimum among hospital patients, and thus they are peculiarly susceptible to the bacilli, to which they fall an easy prey. In time, then, every ward would become a permanent centre of contagion. With these facts in mind, it has been suggested that special hospitals or homes should be established for the treatment and observation of phthisical patients in various parts of the colony.

There are to my mind many objections to a large consumptive hospital within our city boundaries. While I believe that the segregation of consumptives would be beneficial to the community at large, I am afraid their isolation in the bacilli-laden atmosphere of the town must prove injurious to the patients themselves; but I am heartily in accord with the plan of erecting a home for those who are in too advanced a stage to travel to the country districts and benefit by the climatic treatment.

A well-ventilated building containing a small number of beds would be ample for such cases. To this institution an out-door department should be attached, where patients who are unable to leave the city might be treated in the early stages. Such a hospital, together with the existing Hospice for the Dying in Darlinghurst, would be as much as, in my opinion, it would be wise to establish. If a patient be found to be suffering from phthisis, and removal from the impure air of the city be impracticable, he might be treated as an out-patient; but such cases should not be treated within the walls of a city building. I would, therefore, advocate the erection of a small hospital, such as I have described, in Sydney, together with three or four Homes in the country districts, which might be used by those who are in the curable stage, or in the progressive stage, before all hope is abandoned. I am opposed to the erection of a large Consumptive Hospital in the metropolis.

At the Brisbane meeting of this Association in 1895, I had the honour of contributing a paper,* in which I showed the death-rate from phthisis for every district in New South Wales. The figures which I brought forward on that occasion showed that in the city of Sydney there were 1.96 deaths from phthisis per 1,000 living inhabitants annually, while in the suburbs the rate was 1.16, and in the country 0.66. In other words, the ratio of deaths in the city, suburbs, and country was as 3, 2, 1. The

* Published in the *Australasian Medical Gazette*, August 20th, 1895.

northern boundary of the colony, what was then known as the Gwydir Electorate, had one death annually in every 6,225 inhabitants. Next to this came the Kiama district, with one in 6,061. Following closely upon these came the Hastings and Manning (1 in 5,755), Hartley (1 in 5,301), Carcoar (1 in 5,202). These statistics (which, I believe, are the only ones of the kind ever published) show the death-rate from phthisis in every electorate in the colony. With their help, I believe we might mark off on a map suitable centres for the erection of the proposed Homes for the climatic treatment of consumption.

It is useless to erect one home and send all patients there indiscriminately. What will suit one patient will not suit another, and even what will suit a patient in the summer months may aggravate his malady in the winter. We must, therefore, erect homes in localities having different climates. These climates may be divided into three, viz. :—

1. Warm and dry.
2. Cold and dry.
3. Warm and moist.

Warm dry climates are suitable for elderly or weak persons, those with large secreting cavities or catarrhal complications, and chronic cases when free from fever.

Cold dry climates are suitable for those in the incipient stage, or the predisposed, for the young patients who can take exercise, and for those in whom the disease is quiescent.

Warm moist climates suit those who are unable to take exercise, those who are feverish in the early stage, and patients who suffer from bronchitis.

Cold moist climates are totally unsuitable for consumptives.

To sum up, then, I consider that the climatic treatment of phthisis may be carried out by erecting a small hospital in Sydney, to which an out-patient department might be attached. In the country districts sanatoria or farm homes should be established in different climates, so as to suit all persons according to their condition. I cannot now do more than indicate some of the districts which might be suitable for climatic treatment. Probably the most appropriate situations for these sanatoria would be on the western slopes of the Blue Mountains, the Riverina, New England, the Queensland border, on those extensive open plains between the MacIntyre and Gwydir Rivers. A coastal station might be established in the Illawarra or Shoalhaven districts.

On the Continent of Europe and in America the climatic treatment of phthisis has met with

gratifying results. In Dr. Brehmer's Sanatorium at Goerbersdorf, in Prussian Silesia, 5,440 patients were treated during 1876-86. Of these no detailed reports are available in 408, leaving 5,032, which may be tabulated according to Dr. Brehmer's notes as follows :—

Stage of Disease.	Number.	Cured.	Nearly Cured.	Total.
	P.C.	P.C.	P.C.	P.C.
I. ..	1,390—27.63	287—27.8	430—31.0	817—58.6
II. ..	2,235—44.21	152—6.83	335—14.6	477—21.48
III. ..	1,617—28.17	12—0.84	33—2.3	45—3.14

In 1890 special inquiries were made in order to ascertain how long the cure lasted in the case of those discharged from the Institution as cured, or nearly cured. The results showed that in five cases the cure had lasted for 20 to 29 years, in 52 cases from 12 to 21 years, in 38 cases from 7 to 12 years.

In the Falkenstein Sanatorium, on the southern slope of the Taunus Hills, near Frankfurt-on-the-Main, 132 out of 1,022 patients were discharged as cured—13.2 per cent; 117 as nearly cured—11.0 per cent., giving a total of 242—24.2 per cent.

In Dr. Haufe's Sanatorium at St. Blasien, in the Black Forest in Baden, corresponding inquiries into the fate of 324 patients who had been treated in the Sanatorium during the years 1878 to 1889 showed that of 288, about whom information could be obtained, 72 were living in good health from 3 to 12 years later, 201 had suffered more or less from pulmonary catarrh from 2 to 12 years, without, however, having had to suspend their ordinary business; in 12 cases the health got worse, and five patients had died.

The statistics from Dr. Driver's Sanatorium at Reiboldsgrün in Saxony, gave the following results of 2,000 cases :—Cured 13.66 per cent.; materially improved, 28.02 per cent.; improved, 28.60 per cent.; unimproved, 25.20 per cent.; and 4.52 per cent. died.*

I have already taken up much time in the consideration of the climatic treatment of consumptives, but I have done so in order to draw attention to the neglect which has been shown towards this method of curing phthisis. We have in Australia many and varied climates, which, so far, we have made no serious attempt to take advantage of in the treatment of disease. †

CONCLUSION.

What is required most of all is the sanitary education of the masses, and the co-operation

* For the above statistics relating to the Sanatoria I am indebted to Dr. A. von Jaruntowsky's work on "Sanatoria for Consumptives," translated by Dr. E. Clifford Beale. London: The Rebus Publishing Co. Limited.

† To those who wish to go deeper into the subject I would recommend the perusal of an interesting work by Dr. S. E. Solly, of Colorado, U.S.A., on "Medical Climatology." London: J. A. Churchill, 1897.

of individual members of the community. The public must be made to understand that consumption is a preventable disease, that their lives depend, to a great extent, upon the actions of one another, and that the causes of preventable diseases are, as Sir John Simon has pointed out, local conditions of filth and nuisance, polluting air and water, and the reckless dissemination of contagion.

TWO CASES OF ANTE-PARTUM HÆMORRHAGE.

BY FELIX MEYER, M.B., B.S., HON. SURGEON WOMEN'S HOSPITAL, MELBOURNE.

I HAVE thought that some account of two cases—typical of the two forms of ante-partum hæmorrhage of placental origin, separated by a short interval—may be of interest.

CASE I.—Mrs. B., 8½ months pregnant with her third child, was well up to the 19th July last. At 6 p.m., after lifting her child, a very free, painless, vaginal hæmorrhage came on. She immediately went to bed, but the bleeding continued more or less till I saw her at 9 o'clock. She was pale; pulse 110, weak. The os was soft, but did not admit the finger. The child's head could be felt, lying to the left of the os. I regarded the case as one of partial separation of the placenta; and, as the hæmorrhage seemed for the time being to have ceased, I did nothing. I kept her in bed a week. She had no return of hæmorrhage, and her labour on the 6th August was normal. The child was well developed, and healthy. The loss of blood was not more than usual. The placenta was torn across by a rent, which extended centrally through nearly the whole thickness, dividing the mass into two equal parts. The patient made an uninterrupted recovery.

CASE II.—On the night of August 18th, I received an urgent message from Dr. Moss, of Kensington, who has kindly furnished me with the following notes of the case up to the time of my arrival:—

Mrs. N., aged 33. Called first to her on Saturday morning, August 14th, about 8 a.m. Found her 8½ months pregnant. Hæmorrhage from uterus, which had been going on since about 12 p.m. No pains. Has had six children; no miscarriages. When she was four months pregnant, on the 1st, 2nd, and 3rd April last, she had flooding about midnight each evening, which ceased on rising from bed, and did not recur through the day. (The facts related in this last sentence she told me subsequently.)

Washed my hands in perchloride of Hg. solution, and examined her p. v. No dilatation of the os; clots in the vagina, and blood oozing from the uterus. Plugged vagina with three plugs of cotton wool, soaked

in perchloride of Hg. solution. No further hæmorrhage.

Sunday, August 15th.—Patient lively and cheerful. No hæmorrhage and no pains. Removed plugs. Patient wanted to get up, but did not allow her to do so.

Monday, August 16th.—Morning: Nurse called to say patient doing well, and no need for me to call. No hæmorrhage and no pains. Afternoon: About 3 p.m., word came to say patient had fainted. Found on arrival she had rallied. Slight oozing of blood. Plugged again with three plugs.

Tuesday, August 17th.—Morning: Some hæmorrhage through plugs. Put in three more. Evening: Patient doing well. No hæmorrhage.

Wednesday, August 18th.—Morning: Patient still doing well. No hæmorrhage. Oozing of watery fluid through plugs—in all probability, liquor amnii. Afternoon, 5 p.m.: Called to her, as she had again fainted. Determined to bring on labour. Removed plugs. Syringed out vagina with perchloride of Hg. solution, and examined os; found it partially dilated; membranes had evidently ruptured. Put in two large plugs as some hæmorrhage came on, and gave ʒi. liquid extract of ergot. Pains came on in a few minutes. Sent for me about three hours after, to say that child would soon be born. Found patient, as she stated, holding back her pains, for fear child would be born before my arrival. The plugs were the cause of this feeling. Examined with finger, and found os fully dilated, and placenta presenting, and head high up anteriorly. Pains came on regularly and strongly; but, after allowing some time to elapse, as labour was not advancing, I passed my hand into vagina, and tried to get it past placenta, but found it adherent; and as patient had now lost, and was still losing, a considerable amount of blood, I determined to get assistance.

Telephoned for Dr. Felix Meyer, who arrived about 10.25 p.m.

I found the patient blanched and collapsed. Radials scarcely perceptible. All the signs of acute anæmia were present. The os was fully dilated, and the placenta presented almost centrally over it.

Patient's condition was too low for an anæsthetic; so, while Dr. Moss gave a hypodermic injection of 10 minims (3 grains) of Tanner's permanent solution of ergotin, I separated the whole of the placenta from its attachment, and rapidly turned and delivered her of an 8½ months child, which lived only a few hours. There was very little hæmorrhage. Patient's condition was very alarming. She was pulseless and cold, and, being very poor, had neither a properly-trained nurse nor the ordinary necessities of the lying-in room. By having the legs held up at right angles to the body, and bandaging with strips of blanket from the toes to the thigh, and injecting warm brandy into the rectum (we had no transfusion apparatus), some improvement was effected in her condition. After the uterus had fairly contracted, I bound her, still keeping the lower limbs elevated, and left her in charge of Dr. Moss, whose next note is—

Stayed with the patient till 1.45 a.m., giving her every now and then a little brandy and water, and one

or two doses of ergot, the pulse during this time being very weak, and at times hardly to be felt, and patient exceedingly anæmic.

The next morning her pulse was 80, and temperature 100°, and she was put on Quinine Sulph. gr. v., every four hours.

From this on till the 12th September (more than three weeks), on which date she was allowed up on a couch, she ran a temperature ranging between 99° and 101.5°, the highest temperature (102.8°) being reached on the sixth day, on which day a small piece of membrane came away. Dr. Moss further reports that her recovery was retarded by phlegmasia of the right leg, fortunately not of a severe type.

These two cases, as will be seen, indicated on one hand the necessity of a judicious inactivity, and, on the other, of prompt interference. It will be noticed that the hæmorrhage in the first case was unattended with pain—a rather uncommon absence in cases of premature detachment of the placenta. The complete cessation of bleeding after three hours, and the non-recurrence thereof till labour, is, in my experience, very rare in similar cases.

NOTES ON A YEAR'S MIDWIFERY PRACTICE.

BY J. H. MURRAY-AYNSLEY, EKETAHUNA, N. ISLAND, N.Z.

(READ BEFORE THE CANTERBURY SECTION OF THE N.Z. BRANCH OF THE BRITISH MEDICAL ASSOCIATION).

GENTLEMEN,—It may be of interest to give the results of a year's midwifery practice in a large country district, with a few remarks on some of the more interesting cases.

The number of cases attended was 53; three of these were twin cases. The presentations were: Vertex 46, head and hand 1, breech 2, shoulder 2, arm 1, placenta prævia (and shoulder) 1, funis presentation 1.

FORCEPS CASES.

1. Multipara. Contracted pelvis; second cranial position; high operation.
2. Multipara. In labour two days; pains weak; exhausted condition; high operation.
3. Multipara. Third cranial position; head wedged above brim; high operation.
4. Primipara. Third cranial position; contracted pelvis; high operation.
5. Multipara. Head on perinæum; pains very feeble; low operation.
6. Primipara. Contracted pelvis; second cranial position; high operation.
7. Primipara. Head on perinæum; pains feeble; low operation.

8. Multipara. Hydrocephalic child, (dead when called); high operation.

9. Primipara. Head on perinæum; funis prolapsed; low operation.

TURNING CASES.

1. Shoulder presentation. Cephalic version, bi-manual; child living.

2. Arm. When called to this case the hand was protruding from the vagina, luckily it was premature (six months), and the pelvis was roomy.

3. Shoulder. One of the twin cases; premature; lived about an hour.

4. Placenta prævia centralis. Child dead; 7th month.

The percentage of forceps cases may seem heavy, especially in view of the recent controversy regarding the use of forceps, but it must be remembered that many of the poorer settlers employ a midwife or nurse, she sending for the doctor only in the last extremity. Another point gentlemen in town practice forget, is that in a country district you have no one to assist or take another case for you. I have had two patients in labour at the same time, 11 miles apart. Case 2 was one of these. In this case the forceps might have been delayed. Two children died, cases 8 and 9; or rather they were both dead by the time I was called. No. 8 could not have been saved, but Case 9 probably could have been if seen in time. No maternal deaths. Case 7 had perinæum slightly torn; healed perfectly; no other ill effects.

As to general procedure, I cleanse all the external parts before delivery, with 1 in 2,000 sol. Hyd. Perch. If instruments are used they are immersed in a 2% Lysol solution, lubricated with Lano-Creoline; the hands with the same, or Glycerine emollient. It is beneficial sometimes in primiparæ to apply napkins dipped in hot antiseptic solution to perinæum. After delivery of child keep one hand on uterus; express or extract placenta, if it seems needed. After expulsion of placenta inject hypodermic of Ergotinine and Strychnine, syringe with 1 in 2,000 Hyd. Perch. solution, taking care to express all clots and excess fluid, and cleanse external parts. As to subsequent proceedings, if the patient has to be left to a nurse, it greatly depends on who the nurse is, and what the case has been; if there has been much handling or instrumental interference, or in cases of diseased fetus or placenta, and the nurse can be thoroughly trusted, I allow vaginal syringing with 1 in 4,000 Hyd. Perchlor. solution, but generally direct washing of external parts with above solution, and apply napkins wrung out of

same. In only one of my cases (to be described later) was there any temperature above 100°.

Position in Labour.—In occipito-posterior positions I have sometimes used the genu-pectoral position when the head is hitched at the brim, and in my experience with advantage, nor do I find that labour is retarded in this position. In my third forceps case I could not move the head until the patient involuntarily put herself into this position (the woman giving the chloroform allowing her to come partly to). The head at once began to move, and I got the women present to maintain her in that position until the head was on the perineum, then lowered her on her side, and delivered in the usual manner. There were no ill effects to mother or child.

My father-in-law, who has had a large midwifery practice, told me that in some cases he has got the patient kneeling on the floor, chest and abdomen resting on the bed, and has found that position of benefit. Probably, however, Walcher's position (*B.M.J.*, Oct. 31, 1896, page 1,290) will in the future be used in these cases. I tried it in my 6th and 8th forceps cases with success; in No. 8, after trying in the usual position. I also used it without forceps in two primiparae—one slightly contracted pelvis, the other child with large head.

In one case pressure on the fundus had a beneficial result, and perhaps when called early enough might in some cases prevent posterior rotation. I can find only scanty literature concerning the ante-partum medical treatment. I have lately been using a mixture of Viburnum, Celerina and Nux Vomica combined with Quinine, and the results so far seem satisfactory; I have used it in three cases.

Case 1. 4-para; all her previous labours had been tedious, never terminated under 24 hours; given above mixture for previous month; slight pains were felt about 1 p.m., strong pains commenced about 3 p.m.; delivery at 5.20 p.m.; the child was larger than previous ones; both did well.

Case 2 Primipara; mixture, two weeks; pains began at 5 a.m., strong from commencement; delivery at 7.30 a.m.; both well.

Case 3. 3-para; usually two days in labour; mixture, three weeks; discomfort about 5 a.m., slight pains about 8 a.m., strong pains 10.30 a.m.; delivery at noon; both well.

The effect seems to be that the usual premonitory pains and discomfort are lessened or abolished and the expulsive contractions intensified; of course a doubt may arise as to the danger of rupture of the uterus, and when a suspicion of a weakened uterus or mal-pre-

sentation exists one might rely solely on the quinine.

Chloral Hydrate I have used in cases of rigid os with good effect, but it wants pushing.

I tried Antikamnia in two or three cases to lessen the discomfort of the first stage; but without effect.

I have had nine cases of premature birth—one at three months, two at six months, two at seven months, four at eight months. Of the latter two cases were twins. Four of the children are living. Of the full-time children I had two stillborn, the hydrocephalic case and a breech case; no other mortality. I had one case of protracted gestation.

Mrs. R., *æt.* 25, engaged me for her first confinement; last menses about July 20th ("During the third week in July, not later than 20th," was her statement); quickened in beginning of December; I entered, "Expected date, April 19th." On April 21st I was called to her. She had approaching labour pains; os dilating, could easily pass forefinger and feel vertex presenting. The pains gradually decreased, and left her on the third day, by which time the os had closed again. She had no more pains until June 4th, when labour commenced, and was normal, although slow, owing to the size of the head (first cranial position). On June 5th she was delivered of a very large female child. The parents would not have it weighed, but I should say it was about 11lb. weight; nails well above finger-tips. It was certainly 320 days from cessation of menses, and might be two or three days more. I see in Tidy's table of protracted gestations that such a lengthened period is extremely rare, and we know that in newly-married women a period or two is sometimes "missed;" yet the pains coming on so close to the estimated time, and the child being of such a size, there seems to be no doubt that the 21st of April was the full time, and from some cause it was protracted to June 5th. Both mother and child did well.

The case of placenta prævia had been in labour eighteen hours before I was called; "had been losing blood the last two days." I found the sheets soaked with blood, patient pallid, and weak pulse. I could introduce two fingers; found placenta prævia centralis, gave chloroform, and dilated with fingers, introducing hand in about ten minutes. I swept round the placenta, but could not reach its edge, so went straight through; found the shoulder presenting. Turned and extracted a six-months' foetus (dead), removing placenta with hand. Gave douche of Hyd. Perch., hypodermic of Strych c Ergotino, enema hot salt

and water. She made an uninterrupted recovery. Her temperature never rose above 99°.

Mrs. S., 5-para, had ventro-fixation performed about 18 months previous to this confinement. Had suffered during this pregnancy from vomiting and pain in lower part of abdomen. The first stage lasted two days. Pains feeble, but never leaving her. Vomited several times. Afterwards there was a tendency to flooding, checked by injections of Strychnine and Ergotinine. Uterus seemed in good position. The patient made good, but tedious recovery.

Mrs. P., 3-para, on engaging me, stated that about a year before she had a miscarriage. Her medical attendant told her that a three months' fetus had come away. Shortly afterwards, while in Wellington, had pain and discharge from uterus. Was curetted, and a placenta (or placental tissue) removed. A few days after the curetting, a second fetus was discharged. I may say that the first medical attendant was attending a septic case, so did not examine the uterus, as everything at that time seemed all right.

The labour I attended was normal (vertex first position), but she complained of pain towards the left hypochondriac region, and the uterus seemed curiously prolonged in that direction. I wondered if I had a case of twins to deal with, but could only make out a single fetal heart. The placenta was retained, and, after waiting about half an hour, I introduced my hand, and found it in a much enlarged left cornu, where probably the second aborted fetus had been retained. I examined this patient some four months afterwards (for floating kidney), and found the left cornu about one inch longer than on the right side.

The funis presentation case does not call for much comment. It was premature (eight months) when I was called. A coil of the cord was protruding from the vagina. It was pulseless. The head was resting on the perineum. I applied forceps, and delivered a dead child. All efforts—artificial respiration, &c.—failed.

The case of the head and hand presentation was rendered more awkward by the fact that the patient had mitral disease, and was excessively nervous: could hardly bear ordinary examination. I had no one with me that I could trust to give chloroform to such a case; so telegraphed to Dr. Hoskings, of Masterton. However, shortly after the dispatch of the telegram, the patient fainted, and, taking advantage of that, I pushed up the hand, and, pressing on the fundus of the uterus, got the head engaged. The rest was easy, and patient and child did well.

The hydrocephalic case was fairly simple. The woman had been in labour about two days when I was sent for. I found the head presenting second vertex. No fetal heart to be heard. Gave chloroform, and made further examination. The nature of the case was evident from the size of the head. I had no perforator, but, on applying the forceps, and with compression, extraction was fairly easy. The head measured 18½ inches in circumference.

I had one case of double placenta expelled naturally about 25 minutes after birth of child.

NOTES OF A CASE OF RIGID OS UTERI TREATED BY HOT BATHS.

By PATRICK W. HISLOP, M.B., C.M. EDIN.,
GERALDINE, N.Z.

(READ BEFORE THE CANTERBURY SECTION OF THE
N.Z. BRANCH OF THE BRITISH MEDICAL ASSOCIATION).

I WAS called one evening to attend a primipara, aged 40. She had been in labour for 30 hours, with more or less severe pains. I found her in bed having very severe bearing-down pains, both in the back and in front. I was told that the waters had all drained away in the morning, and that she had been having very severe pains for the last three hours. On vaginal examination, I found the head presenting, and the vagina very small. The cervix was hard and rigid, and the os uteri completely closed, so much so that I was unable to pass a sound into the canal. I ordered warm douches, and then gave chloroform. Unfortunately, I had no chloral with me, so could not try the effect of that drug. The chloroform had no effect, the pains becoming more severe and more frequent. The whole uterus was forced down with each pain, and no dilation of the canal taking place, the patient rapidly showed signs of exhaustion. I then determined to incise the cervix, but before doing so I thought that I would try the effect of placing the patient in a hot bath. This was done, the water being kept as hot as the patient could bear it. She was kept in the bath for 15 minutes, during which time, and for half an hour afterwards, the pains ceased. She was put into bed and well covered over. The skin acted very freely. On making a vaginal examination, I was delighted to find that I could easily pass two fingers into the uterus, and gradually dilate it. Further dilatation was slowly but easily carried out by means of Barnes' bags, and the child was delivered by forceps. I had a little difficulty with the perineum, which was extremely rigid, although it had been treated with hot fomentations for two hours. There was a slight rupture requiring

two stitches, and healing in a week. Possibly, the perineum might have escaped if the patient had been placed in the bath again, but this did not seem altogether an easy procedure, as the forceps were in position and my assistance limited. The child was weakly, and died the next day.

The woman was extremely exhausted, but made an excellent recovery. Chloroform was administered, more or less constantly, for five hours, and was frequently pushed to the full surgical limit.

No doubt, if I had been situated where I had been able to call in further advice, some other treatment might have been suggested. As it so happened, I was very glad to prove the great advantage of the hot bath, of which, I must say, I have had little or no hope of success. If ever I again have the misfortune to attend a primipara over 40, I shall assuredly make her spend a part of the earlier stages of her labour in a hot bath. I trust that my report on this case may induce other practitioners to give their experience as to the best means of procuring dilatation of the os in aged primiparæ when the parts are in this rigid state.

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PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Branch was held on Friday, December 17th, 1897, at the Royal Society's room. Present—Dr. C. P. B. Clubbe (President), in the chair; Drs. Crago, Fitzpatrick, Rennie, Fiaschi, Maitland, Litchfield, Sawkins, Hankins, Sydney Jones, Jamieson, Thring, Whisholm, Worrall, Eichler, J. A. Dick, Bennet, Hall, Gordon Craig, West, Macdonald Gill, Littlejohn, Binney, and A'Becket McCarthy.

The PRESIDENT announced the nomination of the following gentlemen:—W. G. Armstrong, M.B., Ch.M. Syd., D.P.H. (Camb.), Bowral; J. B. Meredith, L.R.C.P. & S. Edin., Raymond Terrace; Frank Liddell, M.B., C.M. Edin., West Maitland; Owen F. Paget, M.B., B.C. (Cantab.), Honolulu.

Dr. MAITLAND exhibited a patient upon whom he had performed a plastic operation for the restoration of the nose, and read—

Mr. President and Gentlemen,—I have ventured to show you this case this evening for two reasons—first, because one does not often get the opportunity either of seeing or doing a rhino-plasty; second, because of the extent of tissue that had to be removed. The history of the case is, briefly—

Mrs. T., aged 59, had been suffering from a rodent ulcer of the face for about thirteen years. The growth involved the nose, upper lip, and cheeks. The alæ and soft part of the septum had completely disappeared. The cheeks for about a quarter of an inch on either side of the nose and the middle two-thirds of the upper lip were involved.

In April, 1896, I had her admitted into the Sydney Hospital, and, under an anæsthetic, I freely removed all the tissues involved. Both sides of the cheek were then drawn in as far as possible by means of silkworm gut, and the lip stitched. One month later, the lip being healed, and the cut surfaces of the cheek being covered with fresh granulations, and being free from any signs of diseased tissue, I freshened the edges of cheek and lip, and dissected a flap from the forehead, as recommended by Langenbeck. This was brought down, and stitched to the freshened surfaces. The wound in the forehead was stitched, and filled up with skin taken from the patient's arm. The nose healed in a fortnight and the forehead in a month.

Three weeks after the operation, I removed a wedge-shaped piece from the pedicle, to prevent the formation of a parrot-shaped nose.

I want to draw your attention to one fact, and that is, to the small size of the nostrils. This is due to the fact that the patient neglected to keep them dilated with drainage tubes, as she was told to do; but this can be remedied by a very small operation. It is now a year and seven months since the operation.

Dr. J. ADAM DICK said he remembered a case upon which Dr. Fiaschi had done this operation. The man was 85 years of age. The forehead healed in three weeks, and the other parts healed by first intention in a fortnight.

Dr. SAWKINS exhibited cystic kidneys, and read the following notes on the case:—

The specimens I have to show are two cystic kidneys from an adult male, 25 years of age. He was admitted to the hospital in a condition of partial collapse. He was continually vomiting bile-stained fluid, containing altered blood. Mental condition was normal. Examination of the abdomen revealed the presence of a tumour in left loin. Nothing could be felt on the right side. As all his symptoms might have been caused by a partial

intestinal obstruction, it was determined to perform an exploratory laparotomy. The tumour was then found to be a large cystic kidney, and the right organ was felt to be in a similar condition. The abdominal wound was closed, and the patient died on the following day.

With the specimen, I would exhibit photographs of a somewhat similar condition associated with cystic disease of the liver. These were sent me by Dr. Leahy, of Napier Hospital, New Zealand. The patient (a female adult) had had a lumbar nephrotomy performed.

Only one previous case has been detected at the Prince Alfred Hospital during the last four years. This patient (an adult male) also had an exploratory laparotomy performed.

In searching the literature of the subject, I find that the disease is of comparatively frequent occurrence; but there is a good deal of variance in the several theories as to its nature and causation. Double cystic disease of the kidneys occurs in three distinct conditions—

1st. Commonly in cases of renal cirrhosis, as retention cysts.

2nd. As a congenital condition in some still-born infants, or causing death shortly after birth. The tumour may be so large as to impede labour. The condition is generally associated with other malformations.

3rd. In adults—the clinical course of the disease, where noted, being identical with that of chronic Bright's, and the final issue, death from uræmia. Not associated with malformations.

Hamilton records a series of 62 cases in adults, in which 17, or 27 per cent., were associated with cystic disease in the liver. Coats and others record similar cases associated with cysts in pancreas, lungs, and brain. According to Von Ziemssen, the disease occurs twice as often in males as in females.

The histology of cystic condition found in chronic Bright's is thoroughly well known and understood. The cysts are retention cysts.

In the congenital cystic kidney, numerous cysts of varying size are found in the substance of the kidney. In the smaller cysts the contents are found mingled with urinary products. The adult form consists of numerous cysts embodied in an abundant fibrous matrix, together with remnants of secreting kidney tissue. The cysts have walls of varying thickness. In early stages, the cyst wall has a membrana propria lined with tessellated epithelium, which in later specimens is difficult of detection. When the disease is not far advanced, the pelvis of the kidney is easily recognisable, but later it is filled with fatty tissue. Ureters are always narrow, though pervious, and the supplying vessels small. According to Wilks and Moxon, the renal tissue proper is in a condition of granular cirrhosis. The contents of the cysts are fluid, or sometimes colloid. The fluid always contains albumen, sometimes cholesterolin, while urea and uric acid are generally absent. Occasionally the lining walls of the cysts become papillomatous.

Various theories as to the cause of these conditions have been advanced. The congenital condition in infants, Virchow considers to be due to an intra-uterine nephritis of the renal papillæ, causing blocking of the straight tubes, and consequent dilatation of the proximal portions. Others he accounted for by lack of development of the urine-conducting apparatus, and an unperforated condition of the straight tubes opening on the papillæ. Shattock and Bland Sutton believe these cysts to be new growths of adenomatous nature arising from the inclusion of rests or remnants of the Wolffian body.

For the adult form, Fagge advances the theory that

this disease is merely a modified form of chronic Bright's disease, and that the occasionally associated cysts in the liver are due to vacuolation of the liver cells and occur fortuitously. Coats believes that the disease is identical with the congenital form found in infants: that a minor form of the disease as found in infants is not incompatible with life, and, advancing slowly, does not prove fatal till adult life.

Shattock and Bland Sutton believe this disease to be due to the development of adenomatous new growths from Wolffian "rests," included in the true kidney. Kindfleisch suggests that hypertrophic cystic kidneys may be examples of cystic sarcoma.

If the theory that the kidney cysts are adenomata be correct, those cases associated with similar cysts in liver, pancreas, lungs or brain, would be explained by considering them to be examples of adeno-sarcoma.

In connection with Bland Sutton's theory of Wolffian rests, it is interesting to compare the development of similar tumours in the testis and in connection with the ovary.

In the foetus, the genito-urinary apparatus is developed in connection with a mass of mesoblastic cells known as the "intermediate cell mass." Three foetal structures are formed—the pro-nephros, the meso-nephros or Wolffian body, and the meta-nephros. The pro-nephros soon disappears. From the meta-nephros the permanent kidney is formed—the pelvis and ureters from the hinder part of the Wolffian duct, the secreting part from the intermediate cell mass. From the meso-nephros or Wolffian body are formed—

(a) The parovarium and parosporon, with Gardner's duct and Kobelt's tubes, in the female.

(b) The epididymis, paradidymis, vas deferens, and ejaculatory duct, conil vasculari and tubuli efferentes, in the male.

Now, in connection with the ovary, certain unilocular or multilocular cysts occur, which, in all probability, arise from remains of the Wolffian body in the parosporon. *Parovarian* cysts also are common. Similarly, in connection with the testicle, the condition described as "general cystic disease of the testis" is believed to originate in a remnant of the Wolffian body known as the paradidymis. Such tumours are included by Bland Sutton in the adenomata, and have been observed within a few months of birth, and as late as the fortieth year.

Dr. JAMIESON exhibited a section of the kidney under the microscope.

Dr. LITCHFIELD exhibited a specimen—a cystic kidney from a child 3½ months old.

Dr. CLUBE said that, whatever the exact pathology of these tumours might be, and however interesting they might be to pathologists, they were always of the most *deadly* interest to the unfortunate people suffering from them, as there could be only one termination; and very little, if anything, could be done to prolong their lives.

Dr. RENNIE said that, from an examination of the specimens, he had no doubt whatever that they were adenomatous, and not examples of mere cystic formation occurring in granular kidneys.

Dr. THRING said there was one point he would like to ask about. There seemed to be a change in the liver in a large proportion of cases, as well as the kidneys. In the specimen submitted, what were the white patches in cysts? Were they altered kidney substance, or what were they?

Dr. JAMIESON replied that the patches were principally composed of fat.

Dr. SAWKINS said that the new writers thought this condition one of new growth, and not of degeneration.

Dr. FIASCHI read a paper on the intra-peritoneal

operation for abdominal hydatid, according to Russell's method; with notes of five cases. (See page 5.)

Dr. W. CHISHOLM said in selected cases he thought there was much to be said for the operation. On the same day that Dr. Fiaschi operated on one of his earlier cases, he (Dr. Chisholm) operated on a woman with a very large cyst in the upper surface of the liver. This was a troublesome case, owing to the opening into the cavity being drawn up under the ribs in the process of contraction. From this cavity bile-stained fluid issued in considerable quantity for some weeks. Dr. Fiaschi's patient, who was in the same ward, recovered with but little inconvenience; and he (Dr. Chisholm) felt sure that his patient, though she did not actually say so, was very sorry she had not been under Dr. Fiaschi's care instead of his. Personally, he did not regret having operated by the old method, for he did not feel certain that the patient would have recovered under Russell's method. It was the question as to the escape of bile, and its possible effects, which caused him yet to hesitate in adopting Russell's method for cysts which were deeply situated in the substance of the liver. He (Dr. Chisholm) had adopted the method with most satisfactory results when the cyst had been in the mesentery or omentum. If the antiseptic precautions failed during the course of the operation, he thought the result would be more likely to be disastrous than when drainage was used. In the only case in which he had tried Bond's method the cavity filled up, and after several weeks it had to be opened and drained in the usual way.

Mr. HANKINS said that, no doubt, the treatment of hydatid of the liver after Lindemann's method was in most cases very tedious, and any means which would hasten the closure of the wound without risk to the patient would be most cordially welcomed. He had done Russell's modification of Bond's operation once, but the result did not encourage him to repeat the experiment under similar conditions. The hydatid occupied the right lobe of the liver, bulging on right hypochondrium. Incision at that spot on convex surface. Contents free from daughter cysts, and quite clear. After removal of cyst, the surface of adventile could be seen in every part to be perfectly clean and dry, like the rough side of a piece of leather. Apparently a most suitable case for Bond's method. Wound in liver left open, and allowed to fall back free, and abdominal wound closed. Patient did well for about a week, when bulging reappeared, with symptoms of sapræmia. Abdomen re-opened. Wound in liver perfectly healed. No adhesions to abdominal wall. On incising liver, turbid fluid escaped in large quantity. Liver was now attached to abdominal wall, and drained. Patient ultimately made good recovery. Now, although Dr. Fiaschi did not refer to this point in his paper, Russell attaches great importance to the necessity of allowing free drainage of the sac into the peritoneal cavity. This could not be carried out in my case; hence the failure. This difficulty must generally arise when the liver is opened on the upper or convex surface, as a counter opening would often entail great risk of hæmorrhage or injury to large bile-ducts. The speaker thought the best cases for Russell's operation were those of omental or abdominal hydatids, with thin and collapsible walls. Nevertheless, Dr. Fiaschi's cases were very instructive and encouraging.

Dr. WORRALL said he congratulated Dr. Fiaschi upon his successful cases, and upon the very lucid manner in which he had brought forward the subject of the treatment of hydatid disease in the peritoneal cavity. Notwithstanding the success of the intra-peritoneal treatment in these five cases, he (Dr. Worrall) would not

feel justified in adopting it in the class of case comprised in Dr. Fiaschi's series. It was adapted to, and had its proper field in, an entirely different variety of the disease, viz., multiple hydatids of the peritoneal cavity. This was a condition which, previous to the suggestion of intra-peritoneal treatment, was one of the utmost gravity, and, in dealing with it, the principles and details so clearly explained by Dr. Fiaschi appeared likely to prove of great value. His (Dr. Worrall's) objections to the method—in large, single, or double hydatids of the liver—were, first, the difficulty of making sure that all endocyst and debris had been completely removed; and secondly, that bile, which varied in its effects when it escaped into the peritoneum, but was often distinctly poisonous, might find its way there.

Dr. CLUBBE said he would try this method on the next suitable case. He thought the most suitable cases would be those where the cysts were free in the abdomen or on the under-surface of the liver. One point, he thought, might be varied, and that was that the peritoneal cavity might be drained with a gauze drain for twenty-four hours. He certainly liked the idea of Russell's method. The long convalescence of patients under other methods was tedious alike to both patient and doctor.

Dr. CRAGO said he thought this method a very great advance on the older methods. With reference to the question of giving the peritoneal cavity too much work to do, it should be remembered that the power of absorption of the cavity was enormous.

Dr. FIASCHI replied that Dr. Crago had answered for him the objection that bile-stained fluids might ooze out from the ectocyst cavity into the peritoneum. He fully accepted Mr. Russell's view, that the removal of the endocyst and the altered conditions of pressure on the surface of the ectocyst favoured the oozing out of bile from superficial bile-ducts, feebly supported. He had twice, in cases treated by Lindemann's method, seen bile appear in the discharge one or two days after the operation. Those two cases, he believed, would not have oozed bile had they been treated by Russell's method, and received the support of the intra-abdominal pressure and of the compression pads. As regards the serous exudation which discharges so freely in cases treated by Lindemann's method, he thought that, besides the altered conditions of pressure, we could not deny a share in the causation of it to the presence of air inside the ectocyst, which acted as an irritant. With Dr. Chisholm's dictum, that if the wound in Russell's method gets septic it is all up with the patient, he could not in any way disagree. He quite accepted this as the main risk of the operation, and thought that it was only a question of more extensive statistics to see if this fatal risk is so common as to balance all the other obvious advantages of this method. Whatever method we adopt, it will be impossible to prevent altogether mortality. What we must ascertain is, which of the two methods gives the smallest comparative mortality. Dr. Clubbe's suggestion, that we should try to make the opening in the ectocyst as large as possible, he thought a good one; and though, as a matter of detail, he had not mentioned it in his paper, he had done so with all his cases, to render the complete emptying and cleansing of the ectocyst possible. This he had obtained, not only by making fair-sized incisions, but also by trimming with scissors the edges of the ectocyst, if these were fibrous and non-vascular.

Dr. W. F. LITCHFIELD then read a paper on "The Slow Pulse following Diphtheria, with a Case of Very Slow Pulse," which will appear in next issue, with the discussion thereon.

VICTORIAN BRANCH OF THE BRITISH
MEDICAL ASSOCIATION.

TREASURER'S REPORT.

MR. PRESIDENT AND GENTLEMEN,—

I beg to present herewith my balance-sheet and statement of accounts for the past year. I have struck the balance on November 30, as was done by my predecessor. The income for the year amounted to £452 4s. 9d., the largest sum we have received in any year since the subscription was raised to £2 2s.; for in the last two balance-sheets, in which the income was apparently larger, it was partly made from the amount deposited in the Savings Bank. I should, however, draw your attention to the fact that, of this sum, £42 15s. has been paid in advance for subscriptions for 1898. During the past year there has been no extraordinary expenditure, and there has been no withdrawal from our accrued savings. The interest on the sum in the Savings Bank at the time of the last balance,

viz., £120 8s. 11d., amounts to £5 13s. 8d., which I have added to the principal, making a total of £126 2s. 2d. to our credit at the present time. There is a large amount owing to the Branch for subscriptions for 1897, as well as some arrears for previous years not yet paid. The whole amounts to £206 17s. However, I have followed the example of my predecessor, and not reckoned this sum as an asset, as it is difficult to assess accurately the amount we shall receive. Without reckoning this amount, the excess of assets over liabilities comes to £126 10s. 7d. It will be noticed that we have this year kept our expenditure strictly within the limits of our income, and at the same time have paid off some old liabilities. The Treasurer's accounts may seem rather large, but I have had to pay commission to the bank on the majority of country cheques; I have also paid all the accounts for gas, and I have given a stamped receipt for every subscription.

J. R. M. THOMSON, M.B., CH.B.,
Hon. Treasurer.

STATEMENT OF RECEIPTS AND EXPENDITURE.

NOVEMBER 30, 1897.

To Balance, December 1, 1896	£10 17 3
„ Subscriptions, 1897	290 18 6
„ Subscriptions (arrears)	72 4 0
„ Rent from sub-tenants— Melbourne Medical Association	£10 0 0
Australian Health Society	22 10 0
Medical Defence Association	3 0 0
	35 10 0
„ Subscriptions paid in advance for 1898	42 15 0
	<u>£452 4 9</u>

By Rent	£42 0 0
„ Secretary's petty cash	4 0 0
„ Cash owing from 1896 to Dr. McAdam	1 10 0
„ Cash owing from 1896 to Dr. Mullen	0 11 11
„ Cash to Treasurer for postage, gas, and commission on cheques	2 13 10
„ Stillwell and Co. (latter half 1896)	13 2 0
„ Stillwell and Co. (first half 1897)	13 17 0
„ Payment to N.S.W. Branch for <i>Gazette</i>	124 10 0
„ Drafts to General Secretary for <i>British Medical Journal</i>	207 8 6
„ Bank's commission on same	2 17 0
„ Returned cheque	2 2 0
„ Cheque book	0 2 6
„ Caretaker's wages	9 2 0
„ Cash in hand not yet paid to bank	15 0 0
„ Credit balance in E.S.A.	
Bank	£229 10 0
Less outstanding cheques	16 2 0
	13 8 0
	<u>£452 4 9</u>

Audited and found correct, with vouchers.

CAREY, FROST & CO.,

58 Queen-street, 15/12/97.

J. R. M. THOMSON, M.B., CH.B.,

Hon. Treasurer.

ASSETS AND LIABILITIES, NOVEMBER 30, 1897.

To Amount deposited in Savings Bank (v. pass book)	£126 2 2
„ Amount due from sub-tenants	6 10 0
„ Balance in hand and in E.S.A. Bank	28 8 0
	<u>£161 0 2</u>

By Amount due to N.S.W. Branch for Launceston members	£16 10 0
„ Stillwell's account	12 7 6
„ Rent due December 1	3 10 0
„ Treasurer's account for postage, &c.	2 2 1
Balance	126 10 7
	<u>£161 0 2</u>

Audited and found correct.

CAREY, FROST & CO., 15/12/97.

J. R. M. THOMSON, M.B., CH.B.,

Hon. Treasurer.

PAPERS READ.

- Dr. E. B. Allan—A Fatal Case of Graves' Disease.
 Dr. J. E. Andrews—Notes on Serum Therapy.
 A Case of Ectopic Gestation.
 Mr. Desmond read for himself and Mr. Rudduck—Paper on Mycotic Diseases of Animals and Man.
 Method of Preparing Kangaroo Tendon for Surgical Purposes.
 Dr. Bakins—Uremic Eclampsia.
 Dr. Laurence.
 Dr. Meyer—Notes on Two Cases of Ante-Partum Hemorrhage.
 Dr. Macanish—Two Cases of Reflex Vomiting, with Referred Pain.
 Dr. F. A. Nyulasy—Notes on Removal of a Foreign Body from the Abdomen, introduced through the Uterus.
 Dr. O'Hara read—Exostosis of Base of Skull.
 A Case of Septicæmia treated with Serum.
 Dr. Officer—Serum Diagnosis of Typhoid Fever.
 Notes on Cases of Adenoma of the Rectum—A Clinical and Pathological Study.
 Notes on Death in a Congenital Heart Case.
 Notes on Obstinate Constipation due to Enterolithic Deposits.
 Mr. Rudduck read for himself and Mr. Desmond—A Paper on Meat and Milk Supply of Melbourne.
 Dr. Stirling—Cases of Genito-Urinary Diseases.
 Dr. Springthorpe—Some Cases of Hysteria.
 Dr. Snowball—On Scurvy Rickets, and shewed several cases.

The Council for the year 1897 has the honor to report to the members of the Branch as follows:—

During the year 24 new members have been elected, 5 have resigned, 3 have been referred to other Branches, and 3 have died. The number of financial members stands at 214.

Your Council has met 10 times. The attendances have been as under:—

The President	...	6	Dr. O'Sullivan	...	3
Vice-President	...	8	*Dr. Lawrence	...	5
Dr. Anderson	...	9	Dr. Meyer	...	6
*Dr. Bird	...	2	Dr. Springthorpe	...	4
Dr. Kenny	...	5	*Dr. Snowball	...	2
Dr. Gresswell	...	1	*Dr. Syme	...	5
*Dr. Harricks	...	4	Dr. J. R. M. Thomson	...	9
Dr. Kent Hughes	...	10			

*Elected April 29th, 1897.

The events during the year call for special comment. First, the honor conferred upon Sir T. N. Fitzgerald by Her Majesty, in recognition of his services as a brilliant surgeon—an honor which gave universal satisfaction to the profession in Melbourne; and, secondly, the formation of a district branch in Launceston. This branch already consists of 24 members, and promises to have a very successful career. Dr. C. S. Richardson is the Hon. Sec., and Dr. Maddox President. This is the first district Branch that has been formed in connection with the Victorian Branch of B. M. A., and we hope that arrangements may be made to form others, in some of our large country centres.

Our representative upon the Council of the B. M. A. in England has done much good work for the Australian Branches, notably in connection with the expulsion of Drs. Leith Napier and Ramsay Smith, and in dealing with the vexed question of the unattached member. Dr. Goodall has again been elected our representative upon the Council.

Your Council has been instrumental in persuading the Income Tax Commissioner to allow medical men to be taxed upon their actual receipts, eliminating the question of bad debts.

In accordance with the previous resolutions five additional members of Council were elected by ballot at the April Meeting.

The meetings of the Branch have been much better attended—the average reaching 22 members per meeting—the numbers ranging from 17 to 29. Our visitors have included Professor Watson and Dr. Lendon, of Adelaide.

The best thanks of the Society are due to Veterinary-Surgeons Desmond and Rudduck for several instructive and interesting papers and demonstrations.

EXHIBITS.

- Dr. W. Kent Hughes shewed cases of—
 Vernal Conjunctivitis.
 Complete Iridoplegia.
 Talipes Equino Varus (congenital) in Boy of Six.
 Ungual Exostosis of great toe in Child of 8 years.
 Tubercular Ulceration of Pharynx, with similar condition of Lower Eyelid.
 Double Talipes Equinus.
 Extensive Gouty Deposit in digits of both Hands.
 Fracture-Dislocation of Ankle Joint.
 Hot Air Bath for Treatment of Stiff Joints and Rheumatic Affections.
 Case of Congenital Deformity of both Hands and Feet.
 Ludwig's Angina a Case.
 Case of Lateral Curvature.
 Congenital Displacement of the Lens in Child of 6 years.
 Prehyoid Cyst in Boy of 7 years.
 Dr. Lawrence exhibited—
 Number of Skin Cases.
 Keloid of Fore-arm Cured by a New Process.
 Dr. A. Mackay—
 Case of Rickets, shewing Great Deformity of Lower Ends of Tibia.
 Case of Hysterical Knee Joint.
 Dr. Meyer shewed two patients on whom he had operated—
 (a) Single Girl, aged 26, who had never menstruated.
 (b) Girl, aged 18½, well-defined hard swelling in right iliac region; absence of menstruation for 18 months.
 Dr. O'Hara shewed—
 Case of Amputation at Shoulder Joint by New Method.
 Dr. Snowball shewed—
 Case of Remarkable Recovery from Injury to Abdominal Viscera.
 Well-marked Case of Double Congenital Dislocation of the Hips in Girl of 11 years.
 Hysteria in Girl of 13 years.
 Microcephaly, with curious bulgings anteriorly and posteriorly.
 Dr. Springthorpe—
 Case of Aneurism of Ascending Aorta.
 Primary Lateral Sclerosis.
 Addison's Disease.
 Dr. Stirling reported—
 Case of Excision of 9 inches of Transverse Colon for Cylindrical Epithelioma.
 Dr. Thomson—
 Case of False Keloid removed 18 months without recurrence.
 PATHOLOGICAL SPECIMENS.
 Dr. Officer shewed—
 Rare specimen of Adenoma of the Rectum.
 Specimen of Collapse of Lungs at Bases in Child of 14 years.
 Specimen of Congenital Heart Disease.
 Papilloma of Tongue.
 Dermoid Cyst from Post-Anal Region.
 Dr. Springthorpe shewed—
 Two Hearts (1, that of a seaman, aged 32, with a history of syphilis, and very extensive and chronic mitral stenosis; 2, that of an alcoholic, aged 47 years).
 Extensive series of Specimens from a Case of Endocarditis.
 Dr. Meyer shewed—
 Large Uterine Myoma—removed by Pan-Hysterectomy.
 Dr. O'Hara shewed—
 Tumor composed of Hair that he had removed from Stomach of Girl.
 Embryo from a Case of Early Extra-Uterine Gestation.

We have received from Messrs. Fletcher, Fletcher and Co., of Holloway, London, a sample of Vibrona. It is claimed that *Vibrona* is a delicate vintage wine, containing the entire tonic and aromatic principles of Cinchona Succirubra. It is a well established fact that a carefully prepared and reliable extract of bark is more valuable as a tonic than any of the isolated alkaloids. Until recently, however, it has been practically impossible to prescribe cinchona in many cases, owing to the headache, tinnitus, and other distressing symptoms to which it gives rise. This drawback has now been overcome by the introduction of the Hydrobromic Extract, known as Liquor Cinchonæ Hydrobrom. (Fletcher). It is to this combination that Vibrona owes its peculiar value, the full beneficial effect of the bark being obtained without the possibility of producing cinchonism. The bitterness of the alkaloids is, moreover, so completely covered, that Vibrona can be taken as an agreeable dessert wine.

NOTES OF THREE CASES

READ BEFORE THE LAST MEETING OF VICTORIAN
BRANCH, B.M.A., HELD NOVEMBER 21, 1897,
BY D. MCMASTER OFFICER, M.B. MELB.

I.—PECULIAR RESPIRATORY SYMPTOMS IN THE
DEATH OF A CONGENITAL HEART PATIENT.

NORMAN S. P., male, aged one month, was brought to light in the Women's Hospital, Melbourne, and at birth there was a difficulty in getting the child to breathe. However, it finally breathed, and went on apparently all right for about three weeks. Then it was brought up to the Children's Hospital as an out-patient, with obscure symptoms, pain in the abdomen, flatus, &c.

Then the mother brought it up four days after the first visit to say it was dead, and asked for certificate at 9.30 a.m. At about 10 a.m. I saw it, and the body was then cold, and the conjunctiva insensible and pupil collapsed. Imagine the astonishment I felt when, just as I was turning away, the angles of the mouth were drawn up in a long, gasping breath. I watched, and it did not take another for 50 seconds. The child was immediately placed upon a table, and artificial respiration begun. At this time the heart could not be heard beating, but after a short time of the artificial respiration the heart was heard to beat for about half a minute, and then stop altogether. This stoppage of the heart was confirmed by three independent observers. At the same time that its heart stopped it also ceased to breathe for over two minutes, and so it was thought by all present to be dead. The nurse was instructed to take it to the mortuary. On the way there, however, it was again heard to give a gasping inspiration. It was then taken to one of the wards, and the heart-beats were still inaudible, and it was now galvanized, and was heard then to audibly contract and produce normal heart sounds, or almost normal, but the rate of contraction was only 32 to the minute.

For four hours the respirations were only between one and three per minute, but they were all of the gasping character, and for the next three hours and a half the child took respirations at from one and a half to two minutes forty seconds intervals. A peculiar feature was that the heart could not be heard to beat for the last hour and twenty minutes before the respiration finally ceased. Dr. Stawell can corroborate this statement.

On P.M. examination—

The heart was about normal in size for a child of that age, but there was a small congenital deficiency in the septum between the ventricle, and there was a well-marked crescentic patency of the foramen ovale. These lesions must have permitted a very free admixture of the blood during life, yet cyanosis was absent; at least it was not noticed.

The lungs presented several areas of collapse, notably two wedge-shaped areas at the base—the most common situation. The collapse must have existed for some time, as the surface was well depressed below the surrounding healthy lung tissue.

The other organs were healthy.

This case is remarkable in some respects, and I would like to be enlightened by the experience of members here to-night. That a child can live for eight or nine hours, with respirations so few and far between, seems almost incredible; yet I assure you it is not drawing on my own imagination, as these statements can be confirmed by at least five others who witnessed the progress of the case. The peculiar and varying action of the heart, too, is worth attention. It may be that a slowly beating and weak heart might pulsate so feebly as not to cause any vibration of the

valves, and thus the sounds of the heart might be so faint as not to be audible. It is hardly possible that it could have ceased altogether, and then have started contracting again. These and other interesting features of the case I look with hope to some of the practitioners present to assist in clearing up.

II.—CASE OF OBSTINATE CONSTIPATION CAUSED BY
ENTEROLITHIC DEPOSIT AROUND HAIR BALLS.

Following so closely upon Dr. O'Hara's beautiful exhibit, the following case, though not presenting such a macroscopic beauty in the exhibit as his, is still, I venture to say, not unworthy of your attention:—

Alfred W., *æt.* 6 years, gave a history of being perfectly well till a week ago. He then complained of obstinate constipation and great pain in the lower part of the abdomen. He was put upon medicine of two or three varieties, but did not improve. At the end of a week his mother brought up several small stony particles which he had passed per rectum. A rectal examination was now made, and the lower gut was found to be full of stony particles; it felt like attempting to push the finger into a heap of small stones. The sphincter was now dilated, and the stony masses were then removed by the finger. It was a long job, and when about half of the contents were got away three or four small hair balls were removed, and after that about as much more of the stony masses. It was difficult to get them out without injuring the rectum, so a small hollow scoop was passed along the posterior wall of the rectum, and the masses removed between the finger and the scoop.

I have here some of the stony masses, which have been cleaned by repeated washings and then dried, also the three or four hair balls and a large quantity of the stones mixed up with woolly fibres.

An examination of the stones shows that they originally formed most probably a stone tube, as they are distinctly crescentic in cross section, the outer convex surface being coarsely granular, while the inner concave surface is smooth, slaty-grey or greenish-grey in colour. Between the convex and concave surfaces the substance seems to be made up of a calcareous casing, but I have not yet examined the material of which they are formed chemically.

Most probably the masses were originally higher up in the intestine, and perhaps permitted the passage of the more liquid intestinal contents, but when the mass had passed into the lower gut the faeces broke up the formation of the calcareous.

III.—SPECIMENS OF RIBS FROM A CASE OF
INFANTILE SCURVY.

It will be noticed that the epiphyseal site of the bone is swollen and discoloured with blood, the blood spreading along under the periosteum and raising up that membrane.

These pathological specimens are exceedingly rare, owing to the low mortality in infantile scurvy.

DR. MCADAM said that in the first case all the conditions for cyanosis were present, and yet none was present.

DR. NIHILL noticed in a congenital heart case that the cyanosis was variable and was dependent upon exertion.

DR. OFFICER replied that the theory was that ordinarily the heart beats did not distend the capillaries. He once observed a congenital heart patient faint; pallor was present as in an ordinary patient.

"Treatment of Uræmic Eclampsia," by George Reginald Eakins, M.D. Brux., &c., Echuca, Victoria, appearing in the *A. M. Gazette* for September, is referred to in the December issue of *Medicine*.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

CANTERBURY SECTION.

THE annual meeting was held in the rooms of the Caledonian Society, Christchurch, on October 14th. Present—Dr. Irving (President) in the chair, Drs. Symes, Campbell, Boyd, Fenwick, Thomas, Pairman, Hacon, Manning, Morton Anderson, Bolger, and Diamond.

The Annual Report was read and adopted. This showed that there had been regular monthly meetings, with an average attendance of eleven. Medical papers had been read at each meeting. The committee had met eleven times, and, in addition to carrying out much routine work, had endeavoured especially to forward the interests of the profession in the direction of restraining unlicensed practitioners, and the reckless sale of proprietary medicines.

The Treasurer's Report was read and adopted.

ELECTION OF OFFICE-BEARERS.

The following were elected:—President, Dr. Pairman; proposed by Dr. Hacon, seconded by Dr. Irving. Vice-Presidents, Dr. C. M. Anderson and Dr. G. Campbell; proposed by Dr. Symes, seconded by Dr. Fenwick. Local Editor, Dr. Thomas; proposed by Dr. Cooke, seconded by Dr. Trevor. Hon. Secretary, Dr. Fenwick; proposed by Dr. Boyd, seconded by Dr. Hislop. Hon. Treasurer, Dr. Manning; proposed by Dr. Thomas, seconded by Dr. Symes.

On the motion of Dr. SYMES, seconded by Dr. CAMPBELL, Drs. Jennings and Boyd were added, to make up the Committee of Management.

A protest was lodged against the election of one of the committee, on the ground that he held an appointment as surgeon to a medical aid society. A written statement, affording full information in regard to the position, was read from the member affected, and a free discussion took place. Members generally seemed to be of opinion that the medical aid society referred to was simply an extension of the present Friendly Society system, and the member was held exonerated, the mover in the matter withdrawing his protest.

The annual meeting was then closed, and an ordinary meeting held, the same members being present. The report of committee stated that a circular letter on the subject of patent and proprietary medicines had been forwarded to the sectional secretaries. Letters had also been sent on the same subject to the Minister of Justice, Registrar-General, and the Canterbury representatives. Mr. C. Lewis, M.H.R., had attended a conference, at which the President delivered an address dealing fully with these matters. Mr. Lewis took careful note of the various points, and promised to bring them forward where practicable.

On the motion of Dr. FENWICK, seconded by Dr. CAMPBELL, it was carried that the committee obtain the signatures of ten ratepayers, calling upon the City Council to provide a public mortuary. In relation to this matter, Dr. SYMES suggested the importance of having a disinfecting tank.

The Registrar-General wrote, disclaiming any obligation to initiate proceedings for infringements of the Act, and doubted the efficiency of Clause 23 in the matter. He did not think that, in the present state of New Zealand law, anything could be done to touch pretenders.

A discussion took place in relation to the formation of a Parliamentary Committee in Wellington, and Dr. Thomas evidently voiced the feelings of members when he said that such a committee had proved of no use in the past, and in his opinion our best Parliamentary

Committee consisted of the local M.H.Rs. Reacting upon these would give us the best results.

By permission of the Chair, Dr. SYMES referred to the C.D. Act, and called attention to the jury rider in a recent case, "that it should at once be brought into operation." He had recently been asked, as Police Surgeon, to bring up a report on this Act. In his opinion, this Act lessened prostitution. Brothels were a necessary evil, and where they don't exist the results are masturbation or seduction of young girls. The objection that it was unfair to women might be met with notification, similarly to other infectious diseases.

Dr. THOMAS thought that notification was objectionable, as leading to illegitimate practice. Women could not be viewed on the same footing as men, seeing that they carried on the avocation for a mercenary purpose.

Dr. HACON pointed out the social risks of taking sides in a question on which there were such strong differences of opinion.

Dr. CAMPBELL said that the conference recently held by St. Saviour's Guild had agreed that notification of venereal diseases in the manner adopted for infectious diseases was impracticable.

Dr. FENWICK thought that the notification of venereal disease would be too important a function to place in the hands of the police, unless it was made to medical sanitary authority.

On the motion of Dr. THOMAS, it was agreed that the committee should draw up a report or circular on the subject, with the assistance of Drs. Symes, Fenwick, and Fox.

Dr. SYMES called attention to the circumstance that the City Council were lax in carrying out the numbering of houses, and it was decided to write to the Council, drawing attention to the importance of this.

OTAGO SECTION.

The eighth and last General Meeting of the session was held in the Dunedin Hospital on Wednesday, 27th October, 1897. Present—Dr. Ferguson (in the chair), Drs. Batchelor, Fulton, Roberts, McKellar, A. Stenhouse, and Smith.

The minutes of the last meeting having been read and confirmed, some discussion took place with regard to correspondence received from the Canterbury Section re new Medical Registration Bill and other matters. Finally, it was proposed by Dr. BATCHELOR, seconded by Dr. ROBERTS, and carried,—“That the Secretary telegraph to Mr. Scobie McKenzie, M.H.R., for copies of the Medical Act, and that a special meeting be held to consider it when the copies are received.”

The balance-sheet was then read and adopted.

The office-bearers nominated at the previous meeting for the ensuing year were then elected. A hearty vote of thanks to the retiring secretary (Dr. Smith) was proposed by the Chairman, and carried unanimously.

Dr. SMITH having replied, Dr. FERGUSON proposed the following motion, which was carried unanimously:—“That the Dunedin Section of the New Zealand Branch of the British Medical Association desires to place on record its sense of the loss the profession has sustained in the death of Dr. A. J. Ferguson, and the sympathy of the members with his widow in her bereavement.”

The Secretary was instructed to send a copy of the motion to Mrs. Ferguson.

Dr. FULTON then read a paper on the C.D. Act. Having stated that very exaggerated statements were made about policemen forcibly seizing girls, and detaining them for examination against their will, he read a short extract of the present Act, dwelling on points of importance and interest. He held that venereal disease

should be notified in all cases. Having shown that in the case of syphilis the greatest mortality occurred in infants, he referred to the shocking condition of soldiers in the Indian army, and showed by statistics that there was four times as much venereal disease in the British army as there was in either the French or Russian army. Relaxation of the Act in the English army caused a marked increase in syphilis. The establishment of Lock hospitals tended to reduce syphilis. Cases were quoted, showing how the venereal diseases might possibly be spread by tradesmen, as in the case of milkmen, butchers, &c. He held that cases should be notified to a Medical Board, and penalties strictly enforced for neglect to notify.

Dr. ROBERTS thanked Dr. Fulton for the valuable paper just read. He held that notification of venereal disease was most important, although, no doubt, very difficult to carry out. He considered it quite possible to carry out the Act if done efficiently, without raising any hue-and-cry.

Dr. BATCHELOR said that the paper was a most valuable one, and suggested that it should be printed. He stated that gonorrhoea was the cause of far more deaths in women than syphilis, and yet it was looked upon as a trifling ailment by most persons.

Dr. STENHOUSE stated that about four per cent. of the cases treated at the Dunedin Hospital during the last nine months were directly or indirectly venereal.

Dr. FERGUSON pointed out the difficulty there would be in getting people to own up to having venereal disease, or to allow themselves to be examined.

CANTERBURY SECTION OF THE N.Z. BRANCH OF THE B.M.A.

Dr. HACON laid before the Canterbury Section the following remarks, distributed in pamphlet form among members at the Nelson meeting in March, 1897:—

THE DUTY OF THE STATE.

Why should there be any difficulty in New Zealand in procuring pure calf lymph?

In March, 1882, the New Zealand Government was advised—"It is the duty of Government to propagate calf lymph at vaccine stations."—*Vide Australasian Medical Gazette*, March, 1882, page 77.

Vaccination in the Army.

Since the Army Vaccine Institute was established in January, 1889, and up to the end of the past army year, it has prepared and sent out lymph for no fewer than 290,596 persons. During the past year it has sent out lymph for the vaccination of 43,459 persons, and it has received reports as to the result of its use in 38,251 cases, of which 36,836 were soldiers at home, and 1,415 soldiers abroad. At the home stations primary vaccinations were successful in 97.57 per cent. of the cases, and re-vaccination in 88.94 per cent.; at foreign stations the percentages of success were 67.94 and 36.39 respectively. The results obtained at the home stations are very high and excellent. The annual report on the subject just issued states that the number of calves vaccinated during the year was sixteen, giving an average of 2,880 persons to each calf. The greatest amount of lymph obtained from one calf was sufficient for 3,906 persons, and the smallest amount so obtained for 1,021 persons. The total amount of expense incurred during the year, including cost of calves, instruments, &c., was only £75 7s. 0½d. In connection with the Ashantee Expedition last November, lymph was sent for urgently, and sufficient for 7,008 persons was sent by return of post without any difficulty.—*Daily Graphic*, London, November 4, 1896.

THE ROYAL COMMISSION ON VACCINATION.

Vaccination from the Calf in Germany.

(From our special correspondent in Berlin.)

From the *British Medical Journal*, October 3, 1896.

Animal Vaccine Stations of the Federal States.

With reference to the recommendation of the Royal Commission on Vaccination in favour of the more extensive introduction into this country of vaccination with calf lymph as practised in Germany, the following account of the system prevalent in Germany will be of value:—

The animal lymph used in Germany is supplied almost exclusively by the twenty-five State institutes for the production of animal vaccine established by the thirteen Federal States of Germany.

The Treatment of the Calves.—The calves made use of—light coloured or white females—are supplied at a certain rate of hire by wholesale butchers, to whom the carcasses are returned after slaughter and examination. During the time that the calves remain in the institute—from ten to twelve days generally—they are carefully fed with milk, eggs, and some hay, bran, or oats. The butchers report that the meat of these vaccinated calves is particularly good. The lymph is taken from the animal before slaughter, but it may not be used, of course, until the healthy condition of the animal has been certified after microscopic and macroscopic examination.

Lymph before or after Slaughter.—In order to avoid the loss of time, labour, and material which is inevitable when the animal is not found to be perfectly healthy, some operators do not take the lymph from the calf until after its slaughter and examination. This practice has been objected to on the ground that the pustules might be contaminated by all kinds of impurities during the process of slaughter, but where proper precautions are taken these fears are groundless. At the Cologne Institute, for instance, the lymph is taken after slaughter, and the results are unvaryingly good.

Preparation of the Vaccine.—The following quotation from the last (1896) official report of the Carlsruhe State Institute shows the methods in use there, and is of interest too with regard to the much-debated question of degeneration of vaccine:—

"Where suitable and healthy animals can be obtained, the purely animal propagation of vaccine lymph presents no difficulties. The method rests essentially on the selection of good-sized animals, on unremitting attention to details, solicitude, on the selection and proper preservation of the best developed pustules for further cultivation and for inoculation before the end of fourth day, that is before the beginning of suppuration in the pustules, and finally on the inoculation, not of fresh lymph, but of lymph that has lain three or four weeks or longer in glycerine.

"Occasionally of late the best developed pustules have been completely scraped out, preserved in glycerine, and then, immediately before use, ground to a fine powder. It seems that vaccine so prepared has remained remarkably effective."

A Private Vaccine Establishment.—Curiously enough, though Berlin has its own State Institute for the production of animal vaccine, the vaccine used for the regiments of Guards stationed in Berlin, and for one or two other regiments, is furnished by a private institute, that of Dr. Pissin. This apparent anomaly finds its explanation in the fact that Dr. Pissin cultivated calf lymph previous to the establishment of the State institutes. He was the first to propose and introduce animal vaccine in the year 1866. He supplies the

military authorities with about 40,000 portions of calf lymph annually.

General Use of Calf Vaccine.—In the German army the employment of animal lymph for vaccination is obligatory. But it is not so as far as private practice is concerned, so that here vaccination from arm to arm is occasionally resorted to. But the advantages of animal lymph are so generally recognised in Germany that its use is almost universal *de facto*.

Medical practitioners and vaccinators now have a right to be supplied regularly with weekly supplies of pure calf lymph, *gratis*, by the State.

BY-LAWS OF THE BRITISH MEDICAL ASSOCIATION (N.Z. BRANCH).

BY-LAWS.

Name.

1. The name shall be "The New Zealand Branch of the British Medical Association."

Constitution.

2. The Branch shall consist of the Members of the following Sections:—

- | | |
|-----------------|----------------|
| (1) Auckland | (4) Nelson |
| (2) Canterbury | (5) Otago |
| (3) Hawke's Bay | (6) Wellington |

and such other Sections as may from time to time be recognised by the Council of the Branch.

3. A Section may be formed subject to the approval of the Council in any town or district where one does not already exist, provided that not less than ten duly elected members of the British Medical Association sign the application. Any Section the membership of which shall sink below five, will not be allowed representation on the Council.

Council.

4. The Council shall consist of the Officers of the Branch and of Delegates (or Deputy Delegates).

Officers.

5. The Branch shall have the following Officers:—

- | | |
|-----------------------|------------------------------|
| (1) President | (4) Secretary to the Council |
| (2) President Elect | (5) Editor |
| (3) General Secretary | |

President.

6. The President shall be elected at the annual meeting. He shall take office at the annual meeting following, and until then shall bear the title of "President Elect." He must be a member of the Section in the district in which the annual meeting shall be held. He shall be *ex officio* a member of the Council, and shall have a deliberative and a casting vote.

President Elect.

7. The President Elect shall be *ex officio* a member of the Council, and shall be entitled to a vote.

General Secretary.

8. The General Secretary shall be elected at an annual meeting. He shall be responsible for, and conduct all business referred by the Branch or Council to the London Council. He shall keep a correct list of the members of the Branch, collect all subscriptions, notify the secretaries of the several Sections of the members who are in arrears, and transmit the necessary funds for Journals.

9. He shall keep a separate Bank Account for the Branch, and all cheques must be signed by him, and countersigned by the President.

Secretary to the Council.

10. The Secretary to the Council shall be elected at the annual meeting. He must be a member of the Section in the district in which the next annual meeting shall be held. He shall attend the meetings of the Council and shall record the minutes, conduct the cor-

respondence, and act in accordance with the directions of the Council. He shall not be entitled to a vote except as a Delegate or Deputy Delegate.

Editor.

11. The Editor shall be elected by the Branch at the annual meeting. He may attend the meetings of the Council, but unless appointed Delegate shall not be entitled to a vote. He shall be responsible for all matter sent to the medical papers in reference to the Branch, except such as may be sent by the direction of the Council.

Delegates.

12. A Delegate is a member specially appointed by his Section to represent it at any of the meetings of the Council or Branch. Each Section shall be entitled to at least one Delegate, and an additional one for every twenty over the first ten members.

[For exception see By-Law 3.]

Deputy Delegates.

13. Any Section unable to be represented by one of its own Members may appoint a Deputy Delegate by communication with the Secretary to the Council.

Meetings.

14. The Council shall meet quarterly or as may be necessary.

15. The Council shall consider and decide on behalf of the Branch all matters submitted to it by the Sections or by any general meeting of the Branch, provided always that except in cases of emergency, at least one month previous to the meeting of the Council, notice has been given to each Section through its Secretary of any matter intended to be brought before the Council. The Council also shall control all expenditure on behalf of the Branch. The Council has power to admit new members to the Association, and affiliate unattached members to the Branch.

16. Business to be brought before the Council must be notified to its Secretary not later than two months before the meeting. If the Council be called together at the same time as the annual meeting the Secretary to the Council shall immediately inform the officer (*vide* By-law 28) appointed to have charge of the Annual Meeting, of the business proposed.

17. Any business brought before the Council "on emergency" may not be considered unless three-fourths of the members of the Council present shall be in favour of doing so.

18. At meetings of the Council all members of the Branch or invited guests may be present, but Members of the Council alone have the right of speaking or voting.

19. At meetings of the Council, Sections which have not appointed Delegates or Deputy Delegates shall remain unrepresented.

20. No Deputy Delegate shall be entitled to vote on any question upon which he has not received specific instruction from the Section which he represents.

21. No deed or expression of opinion shall be considered that of the Branch until approved by the Council.

Extraordinary Meetings of Council.

22. An Extraordinary Meeting of the Council shall be called by the Secretary to the Council within three days of his receiving an invitation from the secretaries of three Sections, stating that these Sections have passed resolutions to the effect that such meeting is desirable.

23. Such meeting of the Council shall be called by means of a circular to the secretaries of the Sections, mentioning the object of the meeting.

24. Such meeting shall be called for a date not earlier than one week, nor later than four weeks from the date of the Secretary's circular calling the same.

25. Such meeting shall be held wherever the President may decide.

26. At an Extraordinary Meeting of the Council no question shall be discussed other than those provoking the meeting.

Annual General Meeting.

27. An Ordinary General Meeting of the Branch, to be known as the Annual Meeting, shall be held yearly about such date and at such place as may be prescribed by the Council at the previous Annual Meeting. Each member shall have the right of introducing professional friends.

28. The Section in whose district the Annual Meeting is held shall be responsible for the arrangements in connection with the (Annual) Meeting; and it shall appoint an officer, who may be the Secretary to the Council (duly informing the Sections who has been appointed), to whom all business to be brought before the Annual Meeting shall be notified before the date of the meeting.

29. He shall issue printed invitations for the Annual Meeting to all members of the Branch in the colony, and to the secretaries of the Sections, a programme, including a notice as complete as possible, of the papers and other matters to be brought before the General Meeting of the Branch not later than twenty-one days before the date of the meeting. He shall receive and pay all moneys, and shall complete the list of expenses, not later than the 31st of May following. He shall forward to the Secretary of each Section a copy of the "Expenses List," signed by himself and the President of the Branch, and mention the sum due by each Section. It is expected that each Section will forward to him its share of the expenses not later than the 31st day of July.

Quorum.

30. At meetings of the Council five shall form a quorum, three Sections being represented.

31. At General Meetings of the Branch six members shall form a quorum.

Chairman of Meetings.

32. At all meetings the President shall be Chairman; but if he be absent five minutes after the time appointed for any meeting, those present (if a quorum) shall elect a chairman.

33. The Chairman shall have a deliberative as well as a casting vote.

Order of Business.

34. At each Annual General Meeting the order of business shall be—

1. Formal reception of Delegates.
2. Minutes of last meeting.
3. President's Address.
4. Correspondence.
5. Business as arranged and notified by the Secretary.
6. Election of Officers.

35. At each meeting of the Council, the following shall be the order of business:—

1. Minutes of last meeting.
2. Notification of "emergency business."
3. Correspondence.
4. Admission of new members.
5. Business duly notified as arranged by the Secretary.

36. Business at the meetings of the Council and of the Branch shall, however, take precedence according as the Chairman shall direct.

Conduct of Business.

37. The Minutes of all Meetings of the Council and of the Branch shall be recorded by the Secretary to the Council in separate books kept for the purpose, and

these Minutes shall be confirmed at the subsequent meeting, adjourned or otherwise, of the Council or Branch respectively.

38. At any meeting of the Council of the Branch no Member shall speak more than once to a motion or subject of discussion unless he has the consent of the Chairman, except the proposer of any motion, who shall have the right of reply; and in all proceedings, as occasion may require, resort shall be had to the rules, forms, and usages of the House of Representatives, which shall be followed as far as practicable.

39. All questions arising at meetings of the Council or Branch shall be decided by the sense of the majority of the meeting as ascertained by a show of hands, or, on the demand of any member of Council or Branch, as the case may be, by ballot.

(Exception, see By-Law 18.)

40. All motions and amendments brought before any meeting of the Council or Branch must be in writing, and handed to the Secretary, signed by the proposer and seconder, before they can be discussed.

41. Visitors, not Members of the Branch, may speak at any General Meeting of the Branch if invited by the Chairman.

42. Proceedings of all meetings shall be fully reported at the expense of the Branch in such manner as directed by the Council, and a *resumé* be inserted in a Journal approved by the Council.

Vacancy of Office.

43. In the event of the resignation, death, or incapacity of any Officer, the Council shall appoint a successor to act until the next Annual Meeting.

Expenses of Branch.

44. The expenses of the Branch shall be borne by the several Sections in proportion to the number of their Members at the date of the meeting.

45. The Branch shall be responsible for no expense incurred by any Member of the Branch, excepting only such necessary expenses as are incurred by the Secretaries in the performance of their duties as such, or by any Member specially authorised by the Council to incur expense in prosecuting some work for the Branch.

46. No account shall be passed for payment on behalf of the Branch unless a voucher be produced by the Secretary or other Member through whom the money is paid.

47. All moneys paid by the Branch, except as specially provided in the By-Laws, must be voted by the Council.

Alteration of By-Laws.

48. No By-Law or resolution of the Branch shall be made, altered or repealed except by the Council, after two months' notice of motion. Each notice of motion to state the number of the By-Law and the alteration proposed.

49. Where provision is not made in these By-Laws for any question that may arise, the Council shall refer to and be guided by "The Memorandum and Articles of Association, and By-Laws of the British Medical Association."

MESSRS. BURROUGHS, WELLCOME & Co. have been informed by the Executive Commissioner for the Brussels International Exhibition, that the International Jury on Pharmacy and Medicine have awarded them the Grand Prix and two Gold Medals for the high standard and scientific excellence of their fine Chemical and Pharmaceutical Products.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

A CASE OF FATAL ILLNESS, APPARENTLY FROM LEUCOMAINE POISONING.

By J. A. WHEELER, M.B., B.S. LOND.,
M.R.C.S. ENG., BRISBANE.

AT the 130th General Meeting, held November 2nd, 1897, Dr. LOVE read for Dr. Wheeler notes of "A Case of Fatal Illness, apparently from Leucomaine Poisoning":—

A woman, 43 years of age, was seized with vomiting and purging on Friday, October 8. She attributed this to a foul smell arising from a creek running close to her house, and, on careful inquiry, I was satisfied that it was not due to any article of food. She said that as she passed over the creek the previous evening she almost vomited, and had a feeling of nausea all night. Vomiting and purging commenced on Friday morning, and the vomit was at first bile-stained. This condition she treated herself by means of draughts of hot water, but did not attempt to take food of any sort.

On Monday, October 11, she felt a good deal better, and went to the theatre that evening. The vomiting and purging returned that night, and became more severe all day on Tuesday. On Wednesday morning I was called in, and found her retching incessantly, the diarrhoea having stopped. The vomit was at this time only a little watery mucus, with a sour smell. The abdominal walls were very tender, particularly over the region of the stomach. P. 90 and weak, T. 99°. She was ordered a mixture of bismuth with a little morphia and zymized suppositories, and small bits of ice to suck. Cold compresses were also applied over the stomach. In the evening, as her condition was unchanged, a morphia suppository (gr. $\frac{1}{4}$) was given, and repeated in six hours' time.

On Thursday morning Dr. Love saw her with me, and, as the retching had been very distressing all night, we decided to give a gr. xx. of dry bismuth by the mouth, a hypodermic injection of morphia (gr. $\frac{1}{4}$), and mustard leaves over the stomach. An attempt was made to give iced champagne by the mouth, but had to be given up. Nutrient enemata of peptonized meat-juice with a little whisky were given every three hours. Retching continued all day, and the bismuth and mustard leaves were repeated in the afternoon and evening, and another $\frac{1}{4}$ gr. morphia given at night. T. was 98.6°, and P. 108.

She had a very restless night, the retching

continuing, but not so severely. On Friday the bismuth and application of mustard leaves was continued, and another attempt made to give iced champagne, but it was not retained and was stopped. Nutrient enemata of meat-juice with a slightly-increased amount of whisky were continued, and another gr. xx. of bismuth given in the afternoon. The tongue, which at first was clean, to-day began to get slightly furred, and she complained of an intensely sweet taste in her mouth—even the ice tasted sweet. I obtained some of the urine and tested it carefully for sugar, with a negative result. The temperature during this day varied from 98.6° to 98.2°, and the pulse from 106 to 112.

She had a very fair night, and on Saturday was able to retain small quantities (3i. doses) of peptonized albumen and champagne given alternately every hour. A glycerine enema in the evening brought away about half-a-pint of most offensive liquid, which appeared to be almost entirely mucus. T. 98.2°, P. 110.

On Sunday the retching had almost entirely disappeared, and she was able to retain slightly-increased quantities of peptonized albumen and champagne, and during the day Carnrick's liquid peptonoids were substituted for albumen. The nutrient injections were continued.

During this day she developed a condition of slight stupor, only answering questions on being spoken to loudly. This afternoon the T. fell to 97.6°, and the pulse rose to 120, and flagging, so gr. $\frac{3}{10}$ strychnine was injected hypodermically with good effect.

By Monday morning the stupor had deepened considerably. She was quite two minutes before beginning to answer questions, and held liquids in her mouth for some time before attempting to swallow. Calomel gr. iij. in divided doses were given, and stimulants pushed freely all day.

During the afternoon the respirations became very slow (9-10 to the minute) and very shallow, while the pulse ran up to 130, and became very weak. T. = 97.2°. An injection of atropine (gr. $\frac{1}{10}$) gave improvement in both, the respirations an hour after being 16 and deep, and the pulse falling to 120 and getting stronger; but by 11 p.m. it had risen to 140, and had become almost imperceptible at the wrist. $\frac{1}{10}$ gr. strychnine had no effect. She remained in this condition all night, and by Tuesday morning there was no pulse to be felt at the wrist or in the carotids, while respirations had risen to 40, very shallow. Death occurred at 6.30 on Tuesday evening. No P.M. was made. On Tuesday, at midday, the tongue was dry, shrivelled, and black, and shortly after death a

quantity of horribly offensive fluid escaped from mouth and anus. Discolouration commenced within an hour of death.

Dr. LOVE added that he had seen the patient three times in consultation. It was an obscure case, at first looked on as due to gastric-intestinal irritation. Meningitis was excluded owing to the absence of characteristic symptoms. No article of diet could, by careful enquiry, be discovered as likely to be the cause of the symptoms, which resembled some forms of narcotic poisoning. The pupils were dilated in the later stages, and the stupor was not due to morphia. The kidneys were acting well, and the urine contained no albumen nor sugar. He regarded it as a case of leucomaine poisoning.

Dr. THOMAS enquired if there was any possibility of the symptoms having been due to acute yellow atrophy.

Dr. LOVE said that there was no trace of jaundice, nor was anything abnormal with regard to the liver discovered by physical examination.

THE 11th Annual and 182nd General Meeting was held on January 4th, 1898, in the Society's rooms. Present—Dr. Francis (President), Drs. Robertson, Thomas, Maloney, Hardie, Wheeler, Carvosso, Hopkins, Love, and Turner.

Dr. Bell, M.R.C.S. Eng., L.R.C.P. Lond., was unanimously elected to membership.

The Hon. Secretary read the Report of Council, which, on the motion of the President, was adopted.

REPORT OF COUNCIL.

Mr. President and Gentlemen,—In presenting the Eleventh Annual Report, your Council has laid upon it the mournful duty of recalling to your minds the losses which the Society has sustained through the death of three of its members. Two of our veterans—Dr. Hugh Bell and Dr. J. J. Mullen—having finished their work among us, have gone to their rest. The third, Dr. C. R. Woodward, of Toowoomba, was cut off early in a career of usefulness just commencing. In no former year, I believe, in the history of the Society have so many of us been thus called away.

Of new members, nine have been elected during the year. Two of our members—Drs. Lawes and Green—have left the colony for work elsewhere; one has resigned; and one name has been removed from our list in accordance with the rule relating to members in arrears with their subscriptions. On the other hand, we have had the pleasure of welcoming the return of one of our ex-Presidents (Dr. Hill), after more than a year's absence in the old country.

The date of meeting has during the session been changed from the second to the first Tuesday of each month, and the hour to 8 p.m. for private, and 8.30 p.m. for public business.

The twelve monthly meetings have been fairly attended, and, with one exception, the clinical and scientific material provided has been abundant and of high quality. No fewer than twenty papers have been read—a larger number than during any previous year. It is encouraging to observe that many of these were by members who have not before contributed to the Society's work. In addition to the papers, many clinical cases and specimens of interest have been from time to time exhibited and discussed. Dr. Hardie has given a highly interesting and practical demonstration of the clinical value of the Röntgen rays. A discussion on dengue fever occupied part of one of the meetings, and discussions of value have followed several of the papers read. As a result of one of these, a deputation was appointed to wait on the Home Secretary with regard to the building of a Hospital for Phthisis; and we are

glad to note that to a certain extent the views of the deputation have received practical embodiment.

A most important feature of the year has been the preliminary proceedings with regard to the forthcoming Intercolonial Medical Congress. Five representatives of the Society, in addition to the President, Treasurer, and Secretaries, have been elected to the Executive Committee of the Congress.

The library has been added to by the purchase of various recent medical works, and it is hoped that it is proving of use to many of our members.

As our President for the year has resided out of town, your Council has been indebted to the hospitality of Dr. Love for its place of meeting. Our retiring President has, however, been an example to the other councillors in the regularity with which he has attended our meetings, in spite of the extra fatigue and unavoidable sacrifice of time.

The Hon. Treasurer read the balance-sheet for 1897, which, being audited and found correct, was adopted by the meeting.

BALANCE-SHEET FOR 1897.

	£	s.	d.		£	s.	d.
To Balance from 1896	30	17	1	By A. M. G.	34	5	6
Subscriptions ..	49	8	6	United Service Institute	17	14	3
A. M. G. Subscriptions ..	25	7	0	Books, typewriting, printing & stamps	18	10	5
				Exchange on cheques	0	8	1
				Balance	34	14	4

£105 12 7

£105 12 7

Audited and found correct: DAVID HARDIE, Hon. Treasurer.
January 6th, 1898.

The President read his Valedictory Address. (See page 1.)

Dr. WHEELER moved, and Dr. LOVE seconded, a vote of thanks to the President, for his most able and interesting address. This was carried with acclamation.

LIST OF PAPERS READ DURING 1897.

1. Presidential Address—Dr. Love.
2. Farabru's Amputation—Dr. H. O. Garie.
3. Climatic Treatment of Phthisis in Southern Queensland—Dr. Hardie.
4. Radical Cure of Hernia—Dr. Hopkins.
5. Notes of a Case of Appendicitis—Dr. Fullerton.
6. Refraction Headaches—Dr. Gibson.
7. Notes of a Case of Ricketty Curvatures and Deformities—Dr. McDonnell.
8. Preliminary Note on the Diagnosis of Typhoid Fever by Means of the Serum Reaction—Dr. Turner.
9. Two Cases of Pelvic Abscess—Dr. Byrne.
10. Case of Meningitis due to the Meningococcus Intracellularis of Weichselbaum—Dr. Turner.
11. Induction of Labour by Glycerine Injections—Dr. Love.
12. Notes of a Case of Nephro-lithotomy—Dr. Hopkins.
13. Notes of a Case of Typhoid, complicated with Hemiplegia—Dr. Green.
14. A Case of Cerebral Aneurism—Dr. Ashworth.
15. Lead-poisoning among Queensland Children—Dr. Turner.
16. Ocular Neuritis, Simulating Basal Meningitis—Plumbism—Dr. Gibson.
17. Some Unusual Cases of Lead-poisoning—Dr. Green.
18. X-rays in Surgery—Dr. Thomson.
19. Compositor's Cramp—Dr. Robertson.
20. A Case of Fatal Illness, apparently due to Leucomaine Poisoning—Dr. Wheeler.

WESTERN SUBURBS MEDICAL ASSOCIATION, SYDNEY.

A MEETING of the Western Suburbs Medical Association was held at 121 Bathurst Street, Sydney, on Tuesday, 14th December, 1897. Among those present were:—Dr. Coutie (in the chair), Drs. F. H. Quaife, Rennie, Crago, Walker-Smith, Matheson, Sawkins, Hankins, Binney, Evans, Woodward, Vandeleur Kelly, Marshall, Worrall, Parker, West, Jamieson, Roth, Dixon, Nell, a Beckett McCarthy, Dick, Fiaschi, Isbister, Trindall, Hetherington, Littlejohn and Abbott.

The object of the meeting was "to discuss the relations of the medical profession to the St. John Ambu-

lance Association and the Civil Ambulance and Transport Brigade."

A letter on the subject from Dr. Pilkington was read, and the following gentlemen took part in the discussion:—Drs. Binney, Sawkins, Worrall, Fiaschi, Dixon, Roth, Littlejohn, Vandeleur Kelly, Dick, Neill and Woodward.

On behalf of the St. John Ambulance Association, it was contended that the teaching was purely of "first aid" nature, and intended to qualify the pupils to adopt measures to save sufferers from unnecessary pain and further injury, pending the doctor's arrival.

With reference to the Civil Ambulance and Transport Brigade, Dr. Littlejohn pointed out that changes had been made in the Medical Staff of the Brigade and that, at the present time, only medical men who were members of the British Medical Association could become connected with the Society, also that certain abuses in connection with the Brigade were being corrected. The meeting considered that the Brigade should strictly confine itself to the rendering of first aid, according to the scheme of the St. John Ambulance Association, and to the transport of patients, and any further development in the way of treatment of patients was strongly condemned.

Dr. NEILL proposed the following resolution:—"That the St. John Ambulance Association be written to and requested to withhold from publication in the lay press the names of their lecturers and examiners, and that the Civil Ambulance and Transport Brigade be written to and asked to correct certain abuses mentioned during the discussion." This was seconded, and carried with two dissentients.

LETTER TO THE EDITOR.

BIFOCAL LENSES.

(To the Editor of the *Australasian Medical Gazette*.)
SIR,—Dr. T. K. Hamilton has somewhat misunderstood my remark that it is not possible to combine + or - cylinder with two + spheres. I intended to convey the meaning that it is not possible to do so with success. If he ceases to order such combinations I think he will find that they will give universal satisfaction. Would he kindly inform me in what catalogues they are figured?

Yours, &c.,
W. KENT HUGHES.

"New Truss for Inguinal Femoral Hernia." This letter will appear in next issue.

DINNER AND TESTIMONIAL TO DR. F. NORTON MANNING

It has been decided that the Medical Profession in New South Wales shall entertain Dr. F. Norton Manning at a dinner, at the Australia Hotel, on Wednesday, 9th February, on which occasion he will be presented with a testimonial.

A committee of medical men, including the Presidents of the Medical Associations and Societies in New South Wales, has been formed to carry out this intention, and circulars are being issued.

NOTICES.

All communications intended for publication may be addressed "The Editor, *Australasian Medical Gazette*, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The *Australasian Medical Gazette* and the *British Medical Journal* are supplied to all Financial Members of the New South Wales, Queensland, South Australian, Victorian and New Zealand Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

New South Wales, Dr. Crago, 34 College Street, Sydney; Queensland, Dr. A. W. Orr, Brisbane; South Australia, Dr. T. W. Corbin, Adelaide; Victoria, Dr. J. R. M. Thomson, Essendon; New Zealand, Dr. Graham Campbell, Christchurch, New Zealand.

SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
F. G. CONNOLLY, BRISBANE, Q.; J. W. SPRINGTHORPE,
MELBOURNE, VIC.; W. T. HAYWARD, ADELAIDE, S.A.
AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH JANUARY, 1898.

EDITORIALS.

THE RATIONALE OF MIRACULOUS CURES IN MODERN DAYS.

THE publication of extraordinary and so-called miraculous cures of disease, combined with the still more wonderful rumours in circulation concerning the prodigies resulting from the monosyllabic utterances of a word, the performance of some mysterious passes, or the exhalation of a breath upon some affected part,

naturally arrests the attention, excites surprise, and inspires those who are impressionable with a species of superstitious awe. Divesting these reported occurrences of the usual halo of exaggeration, and making every allowance for partizanship in certain assuredly authentic cases, the facts (?) recorded, and the popular excitement thereby induced, warrant an impartial investigation and consideration by those who are the most competent to inquire into the subject, rather than the hostility and derisive antagonism which is so frequently and injudiciously directed towards those who believe implicitly in these miracles. Without thoroughly acquiescing in all the views and statements so earnestly asserted regarding these miraculous circumstances, and in no way indicating even a suspicion of duplicity on the part of those cured, not even suggesting a charge of bad faith against their witnesses, we confess that we deem it quite possible to harmonise such occurrences with certain phenomena associated with natural laws relating to health and disease.

The individual representative of Mankind of the present day is a very complicated and wonderfully constituted creature, and, according to Darwin, has, in the course of epochs made up of uncountable centuries, become perfected by a process of evolution from living beings of a lower status of development.

For carrying out that inevitable law of nature, "the survival of the fittest," in its due integrity, certain senses have been provided, upon the development, perfection, and intensity of which depends the well-being and successful struggle for existence of each individual. Though an ideal "perfected mortal" should possess these "gifts of sense" intact, yet, through faulty evolution, perversion of natural laws, accident, idiosyncrasy, or some unfathomable reason, that consistency of perfection may not be attained, and a creature of faulty construction, so far as one or more of the special senses are concerned, may be evolved.

As the special senses are to the creature the sole means of gauging, grasping, and contending with the environments of its existence, by the impressions which these senses convey is to be determined an ideal or a faulty existence. Let us, therefore, consider the senses, their functions and fallibilities.

Pain is in itself an indefinable sensation, to which all persons are more or less sensitive. Its seat is in the nervous system. To nerves of sensation is delegated the duty of conveying the feeling of pain to that great central depot, the brain. Another set of nerves—those of motion,

control the contraction or relaxation of the muscles.

The five special senses are controlled by what are called special nerves, those of vision, hearing, smell, taste, and touch; irritation of any one of these produces neither pain nor spasm, but a development of the special attribute of such nerve. In addition to these, there is a so-called sixth sense, known as the "muscular sense," which confers an ability to appreciate the weight of any substance either held in the hand or impinged upon any surface of the body. This latter sense is probably the outcome of the experience of the motor nerves, which enables them to gauge exactly the amount of resistance necessary to enable one to sustain a given weight in the hand, or on any portion of the body.

All these varied outcomes of nerve influences upon the economy of the human body do not affect each individual alike. As the results of heredity, training, or idiosyncrasy, the impressions conveyed by these different systems of nerves vary in intensity and duration. This variation is further diversified by the capability of the brain to receive, and estimate, the value of such impressions.

It will thus be seen that many factors contribute to vary, intensify, or depreciate the multiple impressions received by the nerves and conveyed to the brain.

In addition to this, experience has proved that, in common with humanity, our too-confiding nervous system is liable to imposture and deception. While single messages from each special nerve may convey a correct impression of a certain phenomenon, the combined impressions conveyed by two or more special nerves may lead to fallacy or misapprehension. Take an instance: the contemplation of a sweet-smelling red rose pleases the senses of vision and smell, the subsequent view of a similar red colour may produce an involuntary act of the olfactory nerve, and apparently convey to the sensorium a similar odour to that of the rose, though it actually may not be present.

The nervous system has its eccentricities, varying moods and foibles, which may originate from many sources, such as dyspepsia, want of rest, cerebral excitement or other causes. In addition to this, any of the nerves, conjointly or severally, may become incapable of performing their or its functions, or may become hypersensitive and perform the functions in an exaggerated manner. We have, therefore, for our consideration a very complicated nervous organization, very human, and of great variety, liable to under-estimate, exaggerate, misin-

terpret, or to deceive; unconsciously liable to deception itself, and with a peculiar disposition to the induction of errors in fellow-nerves, just as a telephone wire often conveys to our ear words transmitted along another wire. These facts must be thoroughly grasped to enable us to duly appreciate the many and varying results produced on different individuals by exactly the same phenomena.

To all this must be added another factor, the condition of the nerve-centre to which these variable messages are conveyed. In other words, the mental condition of the subject.

Mankind is a creature of impulse and emotion, subject to many and various forms of disease—physical and mental.

Very frequently it is impossible to determine positively whether certain symptoms indicating disease arise from physical or mental causes. Take pain as an example. The ability for feeling and bearing pain varies very much in different individuals. In some persons of extremely nervous sensibility, the sight of another creature in the act of suffering causes exactly similar sympathetic agonies within themselves, whereas in other cases, either through a nervous callousness, or a highly-wrought fervour of fanatical excitement, such as possessed the martyrs of old, who sang hymns and prayed while their bodies were being burnt, sensation becomes numbed, and suffering ceases. This wonderful power of the mind over the body must be considered as a powerful therapeutic factor in the treatment of disease in its multitudinous forms of invasion. Let us enumerate some familiar instances of the influence of mental impressions on the bodily functions, of such a nature and intensity so as to cure or simulate disease, or even to cause death. Some hypersensitive subject, upon the sight of a nauseous act or object, receives a mental impression which causes vomiting. In some persons, the sight of blood flowing from a wound, or during a surgical operation, impedes the action of the heart and induces fainting. Powerful mental excitement, such as may be produced by news of the death of a near and dear relative, good news, the accession of a fortune, the non-success or success of an important law suit, or many other matters of similar import, produces an inability to swallow food—aptly expressed by that popular novelist Captain Marryatt as “chew, chew, but no swallow.” Mental influence has prolonged the span of life. Instances are recorded, such as that of a dying person expecting and earnestly desiring the presence of a near and dear friend, who has by sheer power of will kept

the vital thread of life intact until the dear one has arrived, and then peaceably yields up existence.

Death has resulted from mental impressions caused by joy, terror, and wild, superstitious fear. A pathetic story once filled the civilized world with sympathetic horror. The caretaker of a cemetery, in France, caught a fine, handsome little boy stealing flowers from a grave garden. He shut him up in a charnel house containing three dead bodies, intending to liberate him at sunset, which he forgot to do; but early next morning he hurried to set him free. Then—alas! too late—he found the little fellow, victim to his thoughtless cruelty, crouched in a corner, dead, his hands so firmly clenched that the nails were imbedded in the palms, the lips bitten through by his teeth, the mouth gaping, the lifeless eyeballs glazed and staring.

It is needless to multiply instances of the powerful influence of mental impressions on the condition of the body. No doubt many of our readers can call to mind numerous cases in point, and we shall now content ourselves with summarising the applicability of the matter now discussed to an explanation of the “rationale of the so-called miraculous cures of modern days.”

Perfect health may be defined as a condition of bodily vigour, in which all the functions of life are normally and perfectly performed with freedom from pain and without variation from natural temperature or other inconvenience.

“A normal condition may be taken as a basis of health: exaggerate that normal condition and the boundary line is passed into the realms of disease. A similar condition holds good physically, psychologically, and in matters pertaining to ethics and religion.

“Animal heat is essential to life in mammals, and is kept up by the chemical interchange in the animal tissues, producing what is known as the combustion of oxygen. Increase this combustion by a too-rapid oxygenation of the tissues, and you have the diseased condition called fever. A sound-minded man may be an enthusiast upon any subject. Let that subject become an all-absorbing one, so as to dominate over all other ideas, and the broad road of insanity is reached.

“In ethics and religion it is very difficult to draw the dividing line which separates a healthy high-minded enthusiasm from that moral perversion and the all-absorbing fanaticism which impels its victim to cope with opposition by cruelty and bloodshed.” *

* “Some Minor Forms of Hypnotic Suggestion,” by S. T. Knaggs, M.D., *A.M. Gazette*, Vol. XV., page 520.

We find that even a well-balanced mind possesses many functions having emotional tendencies. Such a mind, when excited to excessive action, can attain a morbid condition and become endowed with unamiable acquisitions. Thus, caution in excess becomes cowardice, veneration carried to extremes causes bigotry, and an overflow of self-esteem begets egotism.

An imperceptible smile exhibits emotion of a most trivial character, produced by a very light stimulus; so also a twinkle of the eye or a passing shrug of the shoulders. Increase the intensity of the stimulus, be it a joke or comic act, the smile becomes a laugh, the laugh a guffaw, and the shoulder-shrug merges into an immoderate shaking of the sides so that the subject laughs all over his face and body, and all this occurs within the realms of health. Let the stimulus now become some form of a tragedy, and a morbid zone is reached, producing hysterical demonstrations of alternate laughing and crying, and what had previously been jactitations of amusement now become converted into hysterical convulsions of increasing intensity, so as even to culminate in that terrible eclampsia capable of producing death from sheer physical exhaustion. This is of course a figurative diagrammatic case, overdrawn for sake of illustration, and the factors necessary to produce such phenomena would be:—A suitable subject and an appropriate stimulus. The more susceptible the subject to respond to the stimulus the less intense will be the stimulus required. The more frequent the subject is submitted to the influence of a suitable stimulus the intensity of the stimulus may be gradually decreased.

It is thus that we unravel the mystery of the so-called "miraculous cures of modern days." Given a moderately susceptible subject, suffering from some subjective functional disease, it is quite possible by a mental impression, aided by the patient's faith in the efficacy of the cure, to produce the restoration of health. He becomes imbued with the confidence similar to that which enables a man to swim, to keep his balance on a bicycle, or his seat on horseback. The only difference existing between the inexperienced in the water, on a bicycle, or on horseback, and the experienced, is expressed by that one word, "Confidence," which begets a very good and powerful mental impression. Thus explained, the so-called miraculous cures lose their superstitious halo of the supernatural. We thus properly realise what a powerful influence the mind possesses over the body, knowing as we do that it is capable

of soothing the deepest sorrow, of exciting the most powerful emotions, and possessing as it does an influence capable of extinguishing its possessor's life.

LETHBRIDGE v. BOYD.

On another page (40) there may be found an account of this action for damages against a medical practitioner. The case is of interest from several points of view. First: It impresses upon medical practitioners again—if that were at all necessary—the importance of fractures, their diagnosis and treatment in private practice. A practitioner never knows when he may be called upon to defend his diagnosis and treatment of a patient in a court of law; he should fashion his course accordingly. Second: The case shows another instance of how sarcoma can develop at the site of a fracture. Third: This action demonstrates the importance of knowing when a medical attendant can be legally supposed to have finished his treatment of a case. In this action plaintiff sought to hold the defendant doctor responsible for months after he had terminated, as he believed, his treatment. Fourth: This case shows how useful is an institution such as the Medical Defence Association of Victoria, and similarly the New South Wales Medical Union, to those practitioners who are wise enough to become members. The medical practitioner who was defendant in this case was not a member of any such association, had he been a member it is possible that the action might not have come into court.

We take this opportunity to again urge all medical practitioners to join a defence organisation. The N.S. Wales Medical Union and the Victorian Medical Defence Association have almost similar objects, and no practitioner is allowed to become a member of these institutions unless he is of good repute and has been proposed and seconded. Should a practitioner, who is a member, require the assistance of his association, he has to state his case in writing; and afterwards, should the ruling body, after careful deliberation, consider the case a reputable one and deserving of their support, they will give it support to the full extent provided by the laws of the Association. Any practitioner in New South Wales or Victoria who is not a member of his colony's defence organisation should join without delay; and further, in those colonies where there is not a medical defence organisation, all medical practitioners should, without delay, unite and establish one.

PUBLIC HEALTH ACT OF N.S.W.

IN accordance with the Public Health Act of 1896, the Governor, acting on the advice of the New South Wales Board of Health, has declared the following to be infectious diseases within the meaning of the Act:—

Scarlet fever.

Diphtheria and membranous croup.

Typhoid fever.

The proclamation took effect on 1st January, 1898. Necessary forms for notification will be supplied by local authorities, which are: (1) Municipal councils in municipal areas; (2) Police authorities in areas outside municipal boundaries. The penalty for not reporting proclaimed infectious diseases is £5, under clause 21, part iii., of the Act.

LETTER TO THE EDITOR.

THE MEDICAL PROFESSION AND THE CIVIL AMBULANCE AND TRANSPORT BRIGADE.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—As I have been connected with the above institution for the past few weeks, and there appears to be a good deal of misunderstanding regarding its present principles and regulations, I should be obliged if you would kindly publish the following statement concerning it in the *Australasian Medical Gazette*:—

The Civil Ambulance and Transport Brigade exists for two objects, and for two objects only. Firstly, to render first aid in cases of emergency, and instruct the general community in so rendering first aid; and secondly, to place at the service of the community, free of charge, a means of transport for cases of emergency, available at a moment's notice at any hour of the day or night, and in any locality.

Whatever the opinion may be regarding its first object, the second must receive the approbation of all inhabitants of large cities, where accidents are of daily occurrence, and must especially commend itself to the medical profession.

Now, it may be objected that we already have the ancient and honourable Order of St. John of Jerusalem to fulfil these purposes, and that an additional ambulance association is unnecessary and undesirable. The reply to this is, that whereas the St. John Ambulance Association admirably fulfils the first function of the Civil Ambulance and Transport Brigade, it does not efficiently cope with the latter function.

I am aware that the St. John Ambulance Association possesses ambulances ostensibly for this purpose, but it must be within the experience of every medical man of Sydney who has been summoned to attend a case of accident, that the only means of transport actually and practically available is the ambulance of the Civil Ambulance and Transport Brigade. This has certainly been my own experience.

Now, while it will be admitted that an efficient transport service for cases of accident is a most desirable institution in all cities, it may further be objected that all requirements would be fulfilled by the Civil Ambulance and Transport Brigade amalgamating with the St. John Ambulance Association, and supplementing this institution by supplying the necessary transport service. With regard to this, I am informed by

the Hon. Sec. of the Civil Ambulance and Transport Brigade that this institution desires in no way to act antagonistically to the St. John Ambulance Association, but that, so far from doing so, it is ready at the present moment, and has always been ready, to amalgamate with and supplement the St. John Ambulance Association. I am informed that a scheme of amalgamation was drawn up, and after being agreed upon by a joint committee of the two institutions, was finally rejected by the St. John Ambulance Association. Therefore the onus in the matter rests with them, and not with the Civil Ambulance and Transport Brigade, which is desirous of co-operating with the St. John Ambulance Association.

Now, as to the principles on which the Civil Ambulance and Transport Brigade is conducted.

Shortly after my connection with the institution, I submitted to the committee, for adoption by the Brigade, the following principles for its guidance. These principles were unanimously agreed to without demur:—

1. The Civil Ambulance and Transport Brigade shall strictly confine itself to rendering, and instructing the general community in rendering, first aid to the injured; and to transporting cases of emergency.
2. The Brigade shall in all cases place any patient coming under its care in the hands of a medical man as soon as possible.
3. No case shall be transported without the authority of a medical man, except in cases of accident, where, after due endeavour, such authority cannot be procured.
4. All instruction in first aid shall be carried out by duly qualified medical men.
5. The names of medical men giving this instruction, shall, under no circumstances, be advertised in the public papers.

I have not the least desire to figure as a champion of ambulance associations, though I consider that, under proper control, they are excellent institutions. I have stated the above facts merely in fairness to the Civil Ambulance Brigade and to myself. My action in the matter has been throughout entirely in the interests of the profession.

The question is not as to the desirability or otherwise of ambulance associations. We have these institutions now firmly established amongst us, and no action on the part of the medical profession will suppress them. My contention is, therefore, that the best thing for the public and for ourselves is that they should be properly controlled and regulated by medical men. The Civil Ambulance and Transport Brigade is eagerly desirous of being so controlled, and I have been endeavouring for the past few weeks to control it, but if other medical men will not assist in the matter I must shortly give up the attempt I have been making, and leave the Civil Ambulance and Transport Brigade to its own devices.

Surely the worst thing possible for all concerned would be to refuse it the medical control it desires, and cast it off to its own resources.

I am, Sir, yours faithfully,

E. SYDNEY LITTLEJOHN, B.A., M.D., C.M.

94 Darlinghurst-road, Sydney.

December 18, 1897.

A paper by Fourness Barrington, F.R.C.S. Eng., M.B., M.S. Edin. (Sydney), "Impressions of a Year's Gynecology in Germany," which appeared in the *Australasian Medical Gazette* for July last, is freely commented on in the *Therapeutic Gazette* of November 15.

COLLEGE OF DENTISTRY, VICTORIA.

OPENING OF NEW PREMISES.

THE new premises of the College of Dentistry, at 191 Lonsdale-street, Melbourne, were opened on November 16th. The arrangements in the new establishment are not pretentious, but they are very complete. There is a commodious classroom for lecturing purposes, and a large and well-lit operating-room, fitted with the latest appliances, the intention being to combine the work of a dental hospital with the teaching of a college of dentistry. A large number of ladies attended the opening ceremony, as well as many medical men, dentists, and students. The chair was taken by Mr. Simon Fraser, M.L.C., president of the institution, who declared the premises open.

Dr. A. P. Merrill, D.D.S., dean of the college, delivered an address on the objects of the college, the principal one of which was to provide for Australian youths as good training in scientific dentistry as they could obtain by going to the best schools of America or Europe. During the four months since the college was begun about 150 lectures had been delivered in all the various subjects which it was necessary for a dentist to study, and two examinations had been held, with highly satisfactory results. Mr. A. R. Clarke, one of the vice-presidents, proposed "Parliament," and referred to the necessity for an amending bill giving the Dental Board greater power as an educational body. Mr. Zox, M.L.A., responded in a humorous fashion, and eulogised the work which the college had set itself to perform. He concluded by proposing "Success to the College." Mr. John Iliffe, the other vice-president, responded. He said the Dental Hospital had been at work since 1890, and was unique in its way, because it had never been in debt. For the first year 1,179 patients were attended to, and there were 1,863 operations, of which 106 were fillings. Last year they attended to 4,164 patients, and conducted 7,081 operations, of which 1,129 were fillings. Altogether 12,290 persons had been attended to, and there were 21,100 operations. (Applause.) The results of the work already done in the college were gratifying, and he considered that the success of the institution was assured.

The proceedings closed with a vote of thanks to the president, and the company were afterwards invited to partake of light refreshments.

A meeting of medical gentlemen practising at Bendigo, Victoria, was held last month, to form a Bendigo branch of the Victorian Medical Association. Dr. O. Penfold was elected president, Dr. H. L. Atkinson vice-president, and Dr. W. J. Long hon. sec.

PUBLIC HEALTH.

HIS Excellency the Lieutenant-Governor of New South Wales has declared the following diseases, viz., *Scarlet Fever*, *Diphtheria* and *Membranous Croup*, and *Typhoid Fever*, to be infectious diseases within the meaning of the Public Health Act of 1896. On and after January 1, 1898, these diseases are to be notified to the proper authority. The following regulations have been issued in connection therewith:—(GOVERNOR'S REGULATIONS UNDER PUBLIC HEALTH ACT, 1896.—Part III.—1. The form of certificate for notification of cases of infectious disease shall be the form in Schedule A. 2. Medical officers to public institutions shall, in addition to giving the address at which the case is, give the address whence

it was removed. 3. The local authority, on receiving a notification certificate signed by a legally qualified medical practitioner, after ascertaining that the house referred to in it is within the district of the said local authority, shall copy the certificate in the prescribed register, and shall then transmit it by the first post to the Secretary to the Board of Health. 4. If the certificate has been received by the wrong local authority, it shall be forthwith sent by the said local authority to the local authority within whose district the house named in it is situated. 5. Legally qualified medical practitioners shall prepare their claims for fees in the usual official voucher forms, and shall state therein the name of the district in respect of which each claim is made, the date of report, and the patient's name, and shall forward such vouchers to the Secretary to the Board of Health at the close of each month. 6. The form of register to be kept by the local authority for a municipal district shall be the form in Schedule B. 7. The form of register to be kept by the local authority for a police district shall be the form in Schedule C. 8. When the case of infectious disease notified is that of a person of school age, the local authority shall forthwith notify the head teacher of the school usually attended by such person, in the form of Schedule D. 9. The local authority shall deliver at every premises on which the presence of a case of infectious disease has been notified, the notice ordered to be given in section 26 of the Act in the form in Schedule E. 10. The form in which Registrars of Deaths shall notify the Board of Health that they have registered a death ascribed to an infectious disease shall be the form in Schedule F. 11. The owner or occupier of infected premises on whom notice has been served by a local authority to cleanse and disinfect the same or part thereof, and to disinfect or destroy infected articles thereon, who has informed the local authority that he will carry out the said cleansing and disinfecting himself, shall, if he fails to complete it to the satisfaction of a legally qualified medical practitioner, as certified by the latter to the local authority in writing, within the time named in the said notice, be liable to a penalty not exceeding (£20) twenty pounds. 12. The body of every person who has died of an infectious disease shall be wrapped as soon as may be after death in a wrapper, so as to envelope it completely, which wrapper shall be wet with a solution made by mixing five parts of carbolic acid with ninety-five parts of water. 13. Every such body shall be confined, and the lid of the coffin shall be permanently fastened down within twenty-four hours after death. 14. The joints of the lower part of every coffin used to contain the body of a person who has died of an infectious disease shall be watertight. 15. Any person wilfully offending against any of the three last preceding regulations shall be liable to a penalty not exceeding (£5) five pounds. (Smallpox and leprosy must be notified as at present.)

The local Board of Health, Launceston, has received the following report from their Health Officer (Dr. Wilson), on the proposed site for the new fever ward: in connection with the General Hospital, Launceston:—"In compliance with the request of the Public Health Board, I have inspected the site of the proposed ward for infectious diseases in the grounds of the General Hospital. I am of opinion that, under proper management, it will not be fraught with danger to the inhabitants in the neighbourhood. In compliance with the wishes of the Health Committee, I express no opinion on the effect that this building may have on the health of the patients in the General Hospital."

The Tasmanian Government has passed a vote of

\$100 for works at the jetty of the quarantine station, Barnes Bay. A further amount is required to effect certain necessary repairs to the buildings, and it is earnestly hoped the Government will provide this.

Scarlet fever has disappeared from Ulverstone, Tasmania; but an epidemic has occurred at Burnie. The resident medical man (Dr. Rooke) has requested the Central Board of Health to have an inspection made of a certain locality where the disease has been very prevalent, by a skilled authority. An inspection of the locality is to be made.

The Central Board of Health, Tasmania, has passed a resolution affirming that all State schools should be inspected quarterly by the inspectors of the Education Department, with reference to their sanitary condition and the quality of the drinking-water supplied to the children.

VITAL STATISTICS.

SYDNEY.—The Registrar-General's report on the vital statistics of Sydney and suburbs shows that there were 960 births recorded in Sydney during November—viz., 499 of males and 461 of females. The deaths numbered 507—viz., 265 males and 242 females. One hundred and eighteen deaths took place in public institutions. According to the classification of the causes of death, local diseases, with a total of 256 deaths, occasioned 50.49 per cent. of the mortality of the month, and the most prominent in this class were:—Heart disease, 47; pneumonia, 19; enteritis, 64. Constitutional diseases came next with 89 deaths (17.55 per cent.), the principal being—Cancer, 34; and phthisis 37. There was one death from leprosy at Little Bay, an Englishman, aged 72. Specific febrile or zymotic diseases, 81 deaths; diarrhoeal diseases, 56; scarlet fever, 3; typhoid fever, 4; puerperal fever, 4. Diseases or casualties incidental to child-bearing resulted in the deaths of 8 mothers. This represents one death of a mother to every 120 children registered. The number of deaths of children under five years of age was 209, or 41.22 per cent. of the total mortality, and of these 169 were under the age of one year. The number of births to every 1,000 of the population was 2.34, and of deaths 1.24.

MELBOURNE.—During the month of November there were registered in Greater Melbourne 950 births (502 males and 448 females), and 541 deaths (295 males and 246 females). To every 1,000 of the population the proportion of births was 25.62, and of deaths 14.59 per annum. Deaths among children under 5 years of age, 171, of which 127 were under one year of age. The principal causes of death were:—Diphtheria, 4; typhoid fever, 3; scarlet fever, 3; cancer, 25; phthisis, 61; apoplexy, 15; pneumonia, 42; enteritis, 37; bronchitis, 12; Bright's disease, 10.

ADELAIDE.—During the month of October there were registered in the city of Adelaide 78 births and 51 deaths. Four of the deaths were under 1 year of age. There were 3 from cancer, 4 from phthisis, 1 from pneumonia, 7 from old age. There were 846 births and 247 deaths in the colony of South Australia, exclusive of the Northern Territory.

HOBART.—During the month of November there were 49 deaths registered in the registration district of Hobart, but one of these was of a person not usually resident in the district. In the city there were 30 deaths, giving an annual death-rate of 12.4 per 1,000. The principal causes of death were—Cancer, 2; phthisis, 3; tuberculosis, 2; old age, 4; aneurism, 2; heart disease, 2; bronchitis, 1; pneumonia, 1; pleurisy, 1; enteritis, 1; peritonitis, 1; suicide, 1; and the remain-

der were of a general nature. Of the deaths, 3 were of persons under one year of age; 16 between 5 and 65 years, and 11 over 65 years. The total number of births registered was 71—males, 30; females, 41. In the city, 58—males, 25; females, 33.

NEW ZEALAND.—The proportion of deaths registered during November to every 1,000 of the population was 0.94 for Auckland and suburbs, 0.55 for Wellington with suburbs, 0.37 for Christchurch and suburbs, and 0.78 for Dunedin and suburbs. The total births in these four boroughs amounted to 371. The deaths were 137, to which males contributed 63, and females 74. Thirty-one of the deaths were of children under five years of age; 24 of these were under one year of age. There were 7 deaths from cancer, 20 from phthisis, 8 from pneumonia, 3 from diphtheria.

BALLARAT.—During the month of November 113 births were registered in Ballarat and suburbs. There were 50 deaths. The principal causes of death were—Septicæmia, 2; cancer, 6; phthisis, 8; pneumonia, 4.

WESTERN AUSTRALIA.—During the quarter ending September 30, 1897, there were registered in the colony 1,117 births, viz., 575 of males, and 542 of females; of these 62, or 5.55 per cent., were illegitimate. There were 17 cases of twins. The stillbirths numbered 35. During the same period 501 deaths were registered; 352 of these were of males, and 149 of females; and of these 110 were under the age of one year. The principal causes of death were—Typhoid fever, 60; diarrhoea, 7; dysentery, 12; diphtheria, 4; cancer, 6; phthisis, 25; premature birth, 26; bronchitis, 15; pneumonia, 42; enteritis, 21; accident, 37; suicide, 12.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

UNIVERSITY OF SYDNEY.

The following are the results of the annual examinations of students in the Faculty of Medicine:—

FIRST YEAR EXAMINATIONS.

Passed (alphabetical).—L. W. Bond, Eleanor Bourne, J. H. Cahill, W. H. Elworthy, E. B. L. Fitzpatrick, W. H. Horton, F. J. Johnson, R. F. Llewellyn, A. Muscio, E. C. G. Page, W. L. Rees, H. F. Sadler, D. Wallace, B. A., Margaret I. White.

Renwick Scholarship for proficiency in the subjects of the examination.—A. Muscio.

HONOURS.

Chemistry.—Class I.: A. Muscio. Class II.: E. C. G. Page, D. Wallace.

Physics.—Class I.: A. Muscio, D. Wallace. Class II.: R. F. Llewellyn, E. C. G. Page, Eleanor Bourne, Margaret I. White, F. J. Johnson, J. H. Cahill.

Biology.—Class I.: Eleanor Bourne, A. Muscio, D. Wallace. Class II.: E. C. G. Page, R. F. Llewellyn.

SECOND YEAR EXAMINATION.

Passed.—A. Anderson, J. E. V. Barling, J. a'B. D. Barton, B.A., D. A. Cameron, G. B. C. Clarke, E. Combes, H. Cox, Mabel J. Graham, Eleanor C. Greenham, F. G. Griffiths, B. L. Hart, A. C. Holt, B.A., R. W. M'Credie, A. H. Macintosh, R. W. H. Maffey, B.A., Alice Pritchard, B.A., E. J. Savage, W. A. R. Sharp, B.A., G. B. Thomas.

Class Lists.—Anatomy and physiology. Passed with distinction: A. H. Macintosh. Passed with credit: Mabel J. Graham, J. E. V. Barling, H. Cox.

Organic Chemistry.—Honours—Class I.: A. H. Macintosh, Mabel J. Graham, J. E. V. Barling. Class II.: F. G. Griffiths.

THIRD YEAR EXAMINATION.

Passed.—A. J. Blue, W. F. Burfitt, B.A., S. B. Burge,

H. Busby, T. J. Cohen, W. J. Durack, W. E. Harris, H. G. Holmes, H. J. P. Knight, G. J. Lees, J. S. M'Evoy, G. M'Lean, W. R. Oliver, E. R. Roseby.

Class Lists.—Passed with distinction: W. F. Burfitt, B.A. Passed with credit: N. G. Holmes, H. J. P. Knight, aeq.; G. M'Lean, G. J. Lees.

John Harris Scholarship, for proficiency in Anatomy and Physiology: W. F. Burfitt, B.A.

FOURTH YEAR EXAMINATION.

Passed with Credit.—C. B. Blackburn, F. P. Sandes, D. Ac. D. MacMaster, B.A., B.Sc., C. S. Willis, T. G. Wilson, E. Ludowici.

Passed (alphabetical).—G. F. Brade, H. J. W. Brennan, B.A., W. D. Cargill, W. O. H. Eichler, J. Mackenzie, F. W. A. Margarey, E. A. Maraden, J. M. Roe, H. L. A. Shorter, C. J. Taylor, F. W. West, J. C. Windeyer.

FIFTH YEAR EXAMINATION.

Honours at Graduation.—Class I.: J. MacPherson, M.A., B.Sc. (medal). Class II.: E. C. Hall, N. W. Kater, H. Z. Throsby, L. K. Ellis.

Order of merit of fifth year subjects taken together.

Passed with distinction: J. Macpherson.

Passed with credit: R. H. Pulleine, N. W. Kater, L. K. Ellis, E. C. Hall, aeq.; H. Z. Throsby, G. H. Bohrmann, T. W. Lipscombe, aeq.; R. Dey, C. V. Bowker, J. J. O'Keefe, H. S. Stacey.

Passed (alphabetical).—Ada Afflick, Harriet E. Biffin, Julia Carlile-Thomas, P. G. Cooley, H. R. Cope, Alice S. Newton, W. H. Read, H. Sheldon, W. W. Stevens, W. B. Walton.

In the list of passes published it should have been stated that Mr. J. J. E. Durack was awarded the Deas-Thomson scholarship for chemistry and physics.

Albury Hospital, N.S.W.—Dr. G. P. Dixon has been elected resident medical officer, at a salary of £150 per annum.

Barraba Hospital, N.S.W.—Dr. V. Poggioli has been elected medical officer.

Collarendabri Hospital, N.S.W.—Dr. J. E. Foley has been elected medical officer.

Hobart Hospital, Tasmania.—At the December meeting of the Board, the Chairman briefly referred to a number of improvements that had been effected during the past twelve months. They had been engaged during the year in connection with the laboratory, which had been completed, and proved a great acquisition to the institution. The bacteriological laboratory fittings cost £100, and were erected under the direction of Dr. Gregory Spott. There had been a large increase in the number of cases treated and the operations performed by the honorary medical staff. The institution owed a great deal to the honorary medical staff.

Zeehan Hospital, Tasmania.—The Government has voted £500, conditionally to £150 being locally raised, to provide extra accommodation at this hospital.

Queenstown Hospital, Tasmania.—The Government of Tasmania has voted £1,000, provided £500 be subscribed locally, to erect a hospital for the residents of Queenstown and Mount Lyell districts.

New Asylum for the Deaf and Dumb and the Blind, Hobart.—A new asylum for the teaching of the blind and deaf and dumb is being erected in Hobart by the Government, at a cost of £1,100.

LAUNCESTON HOSPITAL (TAS.)

The Hospital Board has received a petition from the members of the Launceston Section of the Victorian Branch of the British Medical Association, asking, in view of a change in the resident medical staff, that in

place of the present arrangement, an honorary staff, consisting of three surgeons and three physicians, be appointed. At the present time the two resident medical officers have sole charge of the patients, and the honorary staff are only called in consultation, or to assist in the major surgical operations.

The petition sets forth that under the proposed system a large saving of expense would result, inasmuch as the salaries of the resident medical officers need not be so large; the poorer classes would receive more or less special treatment, and the general public would receive the benefits of the experience gained by the profession, who would be aided in elaborating their science and perfecting their art.

The petition was received, and will be discussed at a special meeting, the Chairman intimating that before any change could be made the whole question would have to be submitted to Parliament.

It is anticipated, therefore, that the management of the different hospitals in the colony will form the subject of a Parliamentary enquiry in order that some uniform system of management may be adopted.

The Launceston Hospital Board finance committee reported at their December meeting that the total receipts from fees for the past 11 months amounted to £221 12s. 9d., as against £581 19s. 9d. for the corresponding period of last year. At the end of November there was a balance of £95 15s. 1d. in hand, and it was hoped it would be increased sufficiently by the end of the year to enable the Board to meet the expense incurred in the purchase of the bacteriological laboratory.

The foundation-stone of the isolation wards to be erected in the hospital grounds was laid on the 23rd ult. by Mrs. R. S. Scott. The stone bears the following inscription:—"Erected in commemoration of the sixtieth year of the reign of Her Majesty Queen Victoria." A cheque for £500 collected by the public was laid upon the stone, the Government undertaking to supplement this amount by a vote of £850. The Chairman of the Board read a statement prepared by the Surgeon-Superintendent, in which he said there was no intention to make the new wards a hospital for the reception of infectious cases. The wards would be used only as isolation wards in the event of diseases of an infectious character breaking out in the hospital. This statement was received with a considerable amount of satisfaction, as there was a general opinion that the wards would be used for the reception of all infectious cases occurring within the city, and that the patients in the general wards would be exposed to risks and dangers of infection, as the fever wards are within forty feet of the general hospital.

MEDICAL NOTES.

Medical Magistrates.—Dr. Jas. Dickinson, of Bridge town, W.A., has been appointed a Justice of the Peace for that colony.

Dr. W. A. Chapple and Dr. Morice, of N.Z., who left London to attend the public health lectures of the Medical Congress in Moscow, finished their labours at that city and went on to St. Petersburg, where they spent a couple of days sightseeing. From the Russian capital they made their way to Stockholm, and thence to Copenhagen. Whilst in Russia they enjoyed the privilege of free conveyance on the railways, a concession made to all delegates to the conference at Moscow by the Russian Government.

Dr. J. Logan Campbell, one of the oldest residents of Auckland, N.Z., recently attained his 81st birthday, and celebrated it by proceeding with a party to make

the ascent of Rangitoto, a volcanic cone 1,200 feet high, at the entrance of Auckland harbour. A path has been cut through the scoria to enable visitors to ascend more easily, and this occasion was the opening of the road to the public.

NAVAL AND MILITARY INTELLIGENCE.

N.S.W. Forces.—His Excellency the Governor of N.S.W. has been pleased to approve of the following announcements:—Medical Staff Corps—Honorary Surgeon-Captain Joseph Lievesley Beeston, of Newcastle, to be Surgeon-Captain on the Partially-paid Establishment; Surgeon-Captain and Honorary Surgeon-Major Edward Johnston Jenkins, of Sydney, is transferred to the Reserve of Officers; Surgeon-Captain Alexander Jarvie Hood, of Sydney, is transferred to the Reserve of Officers; Honorary Surgeon-Lieutenant Harold Browne, of Molong, N.S.W., resigns his commission; Frederick William Hall, M.D., M.S. Lond., of Sydney, to be Surgeon-Lieutenant on the Partially-paid Establishment.

Tasmania Defence Forces.—His Excellency the Governor of Tasmania has been pleased to approve of the following promotion:—Surgeon-Lieutenant W. W. Giblin, of Hobart, of the Tasmanian Rifle Regiment, to be a Surgeon-Captain.

OBITUARY.

ERNEST HART, D.C.L. (Honoris causa) Durh., M.R.C.S. Eng.; editor of the *British Medical Journal*.

The death of Mr. Ernest Hart is announced by cable to have taken place on the 8th instant. This intelligence will not take Australasians wholly by surprise, inasmuch as this distinguished member of the medical profession was known to have been suffering for some considerable time past from diabetes, complicated with other maladies. Mr. Ernest Hart, born in 1836, was educated at the City of London School. Subsequently he entered the school of medicine attached to St. George's Hospital. He afterwards obtained the post of ophthalmic surgeon and lecturer on ophthalmology at St. Mary's Hospital Medical School, practising for some years as a surgeon, and he was the author of a method of treatment of aneurism. For several years Mr. Hart was co-editor of the *Lancet*, and in 1869 was selected as editor of the *British Medical Journal*. For several years he devoted himself to public works in connection with questions of social and sanitary progress. He was editor of the *Sanitary Record and London Medical Record*, chairman of the National Health Society, chairman of the Smoke Abatement Committee, and chairman of the Parliamentary Bills Committee of the British Medical Association. As hon. secretary of the Workhouse Infirmaries Association in 1866-67 he rendered great public service in exposing, in concert with others, the defective arrangements for the sick poor in workhouses; and in an article on the "Hospitals of the State," published in the *Fortnightly Review* of that year, he laid down a series of propositions for the creation of asylums for the sick, which were subsequently embodied in the Metropolitan Asylums Act (1867). He also established societies for the protection of infant life, the abatement of smoke, and the establishment of cheap concerts for the poor. As chairman of the Parliamentary Bills Committee of the British Medical Association Mr. Hart took part in promoting the better organisation of the medical departments of the army and navy, and in shaping the Public Health Acts. Among sanitary investigations Mr. Hart especially examined into the

various epidemics which have been due to the pollution of milk, has established the necessity of safeguarding the milk supply of towns, and devised a series of regulations to this end which are widely adopted in London, Glasgow, Clifton, &c. After investigating the condition of the peasantry of Galway, Donegal, and Mayo, he published in the *Fortnightly Review* proposals for favouring the creation of a peasant proprietary, and reclaiming waste lands, which were adopted by the Government, and published in the "Migratory Classes" of the Tramways Act, Ireland.

HUGH BELL, M.B. 1843, M.D. 1847, Lond.; M. 1842, F. (by exam.) 1846, B.C.S. Eng.; L.S.A. Lond., 1843, died at Brisbane on December 22. Dr. Bell, who was a colonist of 45 years' standing, was formerly Visiting-Surgeon to the Lady Bowen Hospital, Honorary Consulting Medical Officer to the Hospital for Sick Children, Member of the Queensland Board of Health, Visiting-Surgeon to the Brisbane Hospital, Medical Officer, Brisbane Gaol, and a Member of the Queensland Medical Board.

WALTER BROWN, M.D. Edin., 1846; M.R.C.S. Eng., 1843; L.S.A. Lond., 1841, died at Parramatta, N.S.W., on December 16, aged 76 years. Dr. Brown was one of the best-known and best-loved men in the town. He commenced practice in Parramatta in 1858, and continued until about four years ago. During his long connection with the town, he acted up to the highest ideals of good citizenship. His advice, attendance, and means were ever at the disposal of the poor, and until he relinquished practice altogether he acted as one of the honorary medical officers to the Parramatta District Hospital. He was for many years visiting-surgeon to the Parramatta gaol, and for 12 months acted as medical superintendent of the Parramatta Hospital for Insane at the time Dr. Greenup met with his death at the hands of one of the patients. He was one of the oldest volunteers in the colony—the first captain of the Parramatta volunteer corps—and a good shot. Dr. Brown, at the time of his decease, was the oldest M.D. of Edinburgh University in N.S.W., and was to have taken the chair at the Edinburgh University Graduates' Dinner, given last year in Sydney, but ill-health prevented him.

MEDICO-LEGAL.

LETHBRIDGE v. BOYD.

AN ACTION FOR DAMAGES.

On December 15, 16, and 17, in the Third Civil Court, Melbourne, before Mr. Justice A'Beckett and a jury of six, an action was carried on by Richard Lethbridge, civil servant, against Hugh Boyd, M.D., L. et L. Mid. R.C.P. and S. Edin., of Bendigo, medical practitioner, for alleged unskilful treatment, damages being laid at £5,000. The plaintiff, in his statement of claim, declared that on or about April 20, 1896, he retained the defendant to attend him professionally, and that the defendant unskilfully, improperly, negligently, and ignorantly diagnosed the complaint from which he was suffering. It was set forth that, whereas the plaintiff suffered from sarcoma in the left humerus, the defendant diagnosed the case as one of fracture of the left humerus. The defendant, in his answer, admitted that he diagnosed the case as one of fracture of the humerus, and treated it as such, and he said that such diagnosis and treatment were correct. Mr. Purves, Q.C., and Mr. Leon appeared for the plaintiff. The Attorney-General (Mr. Isaacs) and Mr. Duffy for the defence.

Mr. Purves, in opening the case, said that the plaintiff, who was a school teacher, suffered from pains in the shoulder, and early in 1896 was treated for muscular rheumatism. On April 20, 1896, he fell from a bicycle in Bendigo upon his shoulder, and was placed under chloroform and bandaged by Dr. Eadie. He afterwards went to Dr. Boyd, and told the doctor that he thought he had broken his arm. Dr. Boyd examined him, and said that he had fractured the surgical neck of the humerus. Plaintiff suffered intense agony for many months, and was placed in splints by Dr. Boyd. Afterwards, upon being chloroformed and treated by Dr. Boyd and Dr. Atkinson, a lump on the shoulder, which indicated dislocation, disappeared, but the plaintiff continued to suffer great pain. What the plaintiff really suffered from was sarcoma, a malignant growth akin to cancer. This was ultimately diagnosed by Dr. O'Hara, who amputated the left arm, after receiving a written opinion from Sir T. N. Fitzgerald confirming his diagnosis. The whole of the treatment prescribed by Dr. Boyd aggravated the patient's complaint, and he should not be debarred from recovering damages.

Amongst the witnesses examined for the plaintiff, in addition to himself, were Drs. R. B. Duncan, C. H. Mollison, and Henry O'Hara; while for the defence, in addition to the defendant, there were Professor Allen, Drs. H. L. Atkinson, A. H. Sturdee, George A. Syme, F. D. Bird.

Mr. Isaacs having addressed the jury for the defendant, and Mr. Purves having put the case for the plaintiff, Mr. Justice A'Beckett summed up as follows:—This was an action for negligence, and, in estimating the relation subsisting between doctor and patient, it was not to be supposed that any man was infallible, and the law did not exact from the practitioner that he should possess the highest skill possessed by the most eminent members of his profession. It required, however, that he should be reasonably fitted for the duty which he undertook, that he should give reasonable attention to the case that was presented to him, and that if any peculiarities exhibited themselves in the case he should do his best to explain them, and find the remedy for what should appear to him to be wrong. It was alleged in the statement of claim, however, that the defendant had been guilty of gross negligence, that the disease of sarcoma was not observed, and that what the doctor thought was fracture was sarcoma. With regard to the questions of fact to be decided, there was strong conflict of evidence, but it was for the jury to say which set of facts they adopted. If the jury were in a condition of doubt, being unable to satisfy themselves one way or the other with any reasonable degree of assurance, they were to remember that the plaintiff had brought the defendant into court, and had undertaken to satisfy the jury of what he alleged. The responsibility of doing that rested upon the plaintiff, and if he failed to remove the doubt about the matter the verdict should be for the defendant. Here was a young man, who a fortnight previously had been suffering from rheumatic pains, but not in an acute form. He went about on his bicycle, and met with a severe accident. He appealed to a doctor, who was apparently not prepared to say what was the matter with him, but put his arm in a sling. The plaintiff then went to defendant, who examined him carefully, and found a crepitus or crackling of the bone. The young man had met with an accident which, according to the direct medical evidence, was not unlikely to produce a fracture. The defendant's evidence about the existence of a fracture was without the least ambiguity. He was certain that when he was consulted the ailment was a fracture, and not a sarcoma, and he called the attention of the plaintiff's

sister to the signs of the fracture, and she also detected the crepitus. No high degree of skill was required to detect a fracture. It was looked for, and if present was readily discerned. The treatment adopted by the defendant was such as would be proper for such a fracture. What apparently occurred, so far as the fracture was concerned, was this:—It appeared to have yielded to the ordinary surgical treatment which Dr. Boyd applied, and the defendant was under no difficulty until the complication in connection with the sarcoma arose. As against that view, it was said that the noise which Dr. Boyd heard was the crackling of the sarcoma. All the medical evidence was to the effect that such a crackling could not possibly have been caused by the sarcoma at that stage, and that it is doubtful whether it could have been caused by it at all. It should also be borne in mind that Dr. Atkinson, when he examined the patient, heard no crackling. Of course it was for the jury to decide the point, but it was his duty to tell them how the evidence struck him. It was attempted to be said that the jury could see for themselves from the specimen that there would be a crackling. That was contradicted by all the medical evidence. Neither he (the judge) nor learned counsel were wiser than the medical witnesses. Their course of study obviously enabled them to say with certainty that which might appear to laymen difficult to understand. It would be monstrous to set up conjectural theories against the evidence of those men of science upon scientific subjects. He thought that the jury would say that the leaning that the medical witnesses would have to a brother practitioner, whom they might rightly or wrongly consider unjustly attacked, would not warp their judgment, and that their sense of honour was not so dull and their self-respect so poor that they would stand up in the court and say what they believed to be false because they thought that a brother practitioner was unjustly assailed. It would be lamentable, indeed, if men to whom so much was trusted could be swayed by such circumstances. The jury would be only exercising their judgment as reasonable men in allowing themselves to be guided by the evidence of the scientific experts. Passing to the question of fracture, it should be noted that the fact that no fracture could be detected in the specimen did not prove that no fracture had taken place. Dr. Mollison and Dr. O'Hara were the best witnesses for the plaintiff on this point. Dr. Mollison said that he would have expected more deformity in the specimen if there had been a fracture, but the direct evidence of fracture would be obliterated. He said that the absence of deformity in the bone was opposed to the supposition that it had been fractured. According to Dr. Mollison, there was a large quantity of sarcomatous matter round the bone, which might have destroyed all evidence of the fracture. According to Professor Allen and Dr. Bird, the bone proper had gone, and its place was taken by an irregular growth, which was the result of the tumour. The substance in which the fracture existed had gone, and it was therefore impossible to detect it. The other medical authorities called for the defendant expressed the same views, and almost as strongly. It was to be observed, also, that there was no evidence as to the alleged non-existence of fracture at the time when Dr. Boyd treated him for fracture. Sarcoma was frequently produced by such an accident as this, and the evidence disclosed nothing contrary to the course which the disease would take after the occurrence of a fracture. The existence of the sarcoma at a later period in no way negatived the existence of a fracture at an earlier period. Supposing, however, that during the treatment of the fracture sarcoma developed itself, producing symptoms which were observed or which should have been observed by the medical attendant, as, for instance, excessive pain; then, if

these symptoms were not sufficiently considered, or were passed by carelessly, although the negligence would not be gross negligence as set out in the particulars, there would still be negligence which would justify a verdict for the plaintiff. If Dr. Boyd was the regular medical attendant engaged in constantly looking after the patient, and was kept informed by the patient of all his symptoms, then the doctor could not be absolved from his responsibility. But Dr. Boyd said that his professional attendance on the case terminated on June 1. If Dr. Boyd had left the country on June 1, and had not seen the patient again, it would be utterly unjustifiable to charge him with negligence, but if, on the other hand, he continued to see the plaintiff professionally, as the plaintiff alleged, then Dr. Boyd could not be relieved of responsibility by the plea that he considered his professional attendance to have ceased, and that he was not charging for further attendances. Upon this point there was a direct conflict of evidence, the plaintiff alleging that he visited the doctor several times in his surgery, and also saw him in the street, and the defendant alleging that the conversations which he had with the plaintiff were not professional, but simply general. As to the alleged dislocation, the preponderance of evidence was greatly in favour of there having been no dislocation, and, as to the visibility of the sarcoma, the medical evidence went to show that the growth could only have been visible for about two months prior to amputation. The doctor was not answerable for a later disease, which might have been latent at the time of the fracture, or might have been caused by it; but if he was called upon to observe the patient, and if he was informed of the patient's symptoms, which should show to an intelligent and educated mind that there was something wrong in addition to the fracture, then he could not get rid of his liability by saying that his last charge for professional attendance was on June 1. As to damages, the jury would bear in mind that the young man must have lost his arm in any case. If the jury thought that there had been negligence, then they would assess damages to compensate the plaintiff for the pain which he suffered during the time that the arm was unnecessarily part of his body. Of course such a verdict would be much more serious to Dr. Boyd than could be expressed in damages. If the jury were unable to satisfy their minds upon the case, then the law provided, and reasonably so, that, as the plaintiff was unable to satisfy them of the merits of his case, they should find for the defendant.

After a retirement of a quarter of an hour, the jury returned into court with a verdict for the defendant.

LUKER V. HAGARTY.

A CERTIFICATE FOR COSTS.

AN argument on the question whether a certificate for costs should be granted in the case of *Luker v. Hagarty* was held before Mr. Justice Owen, of the New South Wales Supreme Court, on December 2nd last. The plaintiff, Donald Luker, M.B., Ch.M., had sued Denis Joseph Hagarty to recover damages for alleged libel, the article complained of having been cut from a newspaper and pasted up in the bar of the defendant's hotel at Brewarrina. Plaintiff was a medical man practising at Brewarrina, and the article reflected on his skill in his profession. The jury returned a verdict for plaintiff for £25, and the question of a certificate for costs was adjourned. Mr. Wise and Mr. Carlos (instructed by Mr. James Lynch, of Brewarrina) appeared for the plaintiff, and moved for a certificate for costs; Mr. Pring (instructed by Mr. T. M. Slaterry) appeared for the defendant.

His Honor, after hearing argument, granted the certificate. He said the character of a professional man, such as a medical man, was of great importance to him, and he was of opinion that the action could have been more cheaply brought in Sydney than in the District Court in the locality. The defendant did not plead justification—that the libel was true, and that it was for the public benefit to have these matters ventilated; nevertheless, in mitigation of damages, he could have gone into the allegations; and if he had done so, the charges being that a medical man had been guilty of negligence, of malpractice or ignorance in the exercise of his profession, it would have been necessary for the plaintiff to call the most eminent medical men he could find to vindicate his treatment of the patient; and it was only in Sydney evidence of that kind could be obtained. He (his Honor) was also of opinion that but for the statement of plaintiff's counsel, that the plaintiff only came into court to vindicate his character, and did not want heavy damages, the jury might have given much heavier damages. For those and other reasons, the certificate for costs would be granted; and, as the libel was, in his opinion, a gross one upon the character of the plaintiff, he declined to make any order as to scale of costs.

MEDICO-PARLIAMENTARY.

FEDERATION AND THE MEDICAL PROFESSION.

A DEPUTATION from the Medical Defence Association of Victoria waited on the Premier on Thursday, December 23rd, and pointed out that it had been stated by the President of the Medical Congress at Toronto, a few months ago, that, owing to the provinces of Canada losing autonomy, medical graduates of the provincial universities had been debarred from registration in Great Britain unless they underwent a further examination. The Victorian Association pointed out that if the Australian colonies became federated the students of Melbourne and Sydney Universities might be similarly treated. Sir George Turner replied that the federated colonies would still retain the power of self-government. He thought the fears expressed were groundless, but he suggested that the Association should write to the British Medical Association as to whether Victorian graduates would be disqualified, and have the reply cabled, so that the matter might be dealt with at the sitting of the Federal Convention. The deputation also asked that provision should be made in the federal constitution requiring all medical students to pass a standard examination to enable them to practise in any colony without further examination. Sir George Turner promised to look into the matter, but added that if this was conceded to one profession others might want similar treatment.—*Sydney Morning Herald*.

MEDICAL ETHICS.

THE following announcement has been extracted from the coloured Christmas number of a N.S.W. country newspaper:—

[A CARD.]

DR. F. W. E * * * * *

Presents the
Compliments of the Season
to his Clientèle, and wishes all

A hale, hearty, and prosperous
New Year.

CHANGE OF ADDRESS, &c.

ALLAN, Dr. E. B., has removed from Collins-street, Melbourne, to Daylesford, Vic.

ANDERSON, Dr. THOMAS L., late of the Melbourne Hospital, has commenced practice at Fremantle, W.A.

ASHWORTH, Dr. L. N., has removed from Warwick to Aramac, Q.

COOPER, Dr. H. E., has obtained an appointment at Galley Swamp, near Carcoar, N.S.W.

CORY, Dr. G. C., formerly of Bingara, has commenced practice at Junee, N.S.W.

DICK, Dr. ROBERT, of Randwick, N.S.W., has returned from Europe per steamer "Koenigin Luise."

DIXON, Dr. G. P., late of Sydney, has gone to Albury, N.S.W., having been elected resident medical officer at the local hospital.

FOLLEY, Dr. J. E., a recent arrival, has settled at Collarenebri, N.S.W., having been appointed medical officer of the local hospital.

GAMBLE, Dr. FREDA, late of the Melbourne Hospital, has commenced the practice of her profession at 55 Collins-street East, Melbourne.

HART, Dr. J. W., has removed from Barraba to Gunning, N.S.W.

HAY, Dr. J. B., formerly of Deniliquin, N.S.W., has settled at Cobden, Victoria.

HAYWOOD, Dr., is acting as assistant for Dr. Rooke, of Burnie, Tas., who has recently recovered from a severe illness.

HEERING, Dr. EDWARD KEN, has purchased the practice of Dr. Harbison, at Shepparton, Vic.

HINDER, Dr. H. V. C., of Ashfield, near Sydney, has gone to England for a few months.

JERMYN, Dr. W. H., late of Nyngan, N.S.W., has joined his brother at Mt. Gambier, S.A.

JOHNSTON, Dr. A. A., has removed from Clifton Hill, Vic., to Penola, S.A.

JONES, Dr. P. SYDNEY, of 16 College-street, Sydney, has gone to Europe per Orient Co.'s steamer "Orizaba," for a year's holiday.

LANCASTER, Dr. L. B., late of Sydney Hospital, has gone to Warwick Hospital, Q.

MACCARTHY, Dr. C. E. de LACY, late of Feilding, N.Z., has commenced practice at Zeehan, Tas.

POGGIOLI, Dr. V., has settled at Barraba, N.S.W., having been elected medical officer of the local hospital.

PORTER, Dr. G. D., has removed from Richmond to Nelson, N.Z.

SCOTT, Dr. G. AFFLECK, has removed from Maryborough to Ballarat, Vic.

SIMPSON, Dr. F. W., formerly of Booleroo Centre, S.A., left for England in the steamer "Damascus."

SLATER, Dr. HOWARD, formerly of Karridale, W.A., has settled at Whitianga, N.Z.

SPARK, Dr. E. J., has returned to Hobart.

STEPHEN, Dr. W., a recent arrival from Canada, has commenced practice at Waiwera S., Otago, N.Z.

STEWART, Dr. A., has removed from Montalbion to Irvinebank, Q.

TENNANT, Dr. E. G., late of Wagga, has settled at Marrickville, Sydney.

TIBBITS, Dr. W. H., has removed from Gunning to Dubbo, N.S.W.

WARREN, Dr. J. M., has returned from his trip to Europe, and commenced practice at Westport, N.Z.

WILLIS, Dr. T. H. R., has removed from Daylesford to Malvera, Vic.

MEDICAL APPOINTMENTS.

THE following medical appointments are announced:—

Bowker, C. V., M.B., &c., to be a Resident Medical Officer of the Sydney Hospital.

Branson, G. A., M.R.C.S., &c., to be a Public Vaccinator at Bendigo, Vic., *vice* Dr. J. Ames, resigned.

Byrne, W. S. O., M.D., to be a member of the Queensland Medical Board, *vice* the late Dr. J. J. Mullen.

Cobb, J. F., M.R.O.S. Eng., to be Government Medical Officer and Vaccinator for the district of Rylstone, N.S.W., *vice* Dr. J. Eaton left the district.

Cope, H. R., M.B., &c., to be a Resident Medical Officer of the Sydney Hospital.

Dermer, W. T., M.B., Ch.B., &c., to be Officer of Health for East Fremantle, W.A.

Dixon, G. P., M.B. Syd., &c., to be Resident Medical Officer at the Albury Hospital, N.S.W.

Dooker, Dr. W. B., to be Assistant Resident Medical Officer to the Midwifery Branch of the Women's Hospital, Melbourne.

Downie, T. T., M.B., &c., to be Public Vaccinator at Clifton Hill, Vic., *vice* Dr. A. A. Johnston, resigned.

Gamble, H. W. B., L.R.C.S., &c., to be Acting Officer of Health for Creswick Shire, Vic., *vice* Dr. Wm. Cory, resigned.

Gibson, J. Lockhart, M.B., &c., to be a member of the Queensland Medical Board, *vice* the late Dr. Hugh Bell.

Johnston, A. A., L.R.C.S., &c., to be Medical Officer to attend to the destitute poor and aborigines within the District of Penola, S.A.

Kelsall, H. T., M.D., &c., to be a Member of the Dental Board for Western Australia.

Lovegrove, T. H., M.R.C.S. Eng., &c., to be a member of the Medical Board of Western Australia.

McClelland, W. C., M.B., &c., to be Medical Superintendent of the Sydney Hospital, *vice* Dr. E. H. Binney, resigned.

Malcolmsou, J. F., L.F.P.S., &c., to be Officer of Health for the Town of Port Melbourne, Vic., *vice* Dr. W. S. Smythe.

Noonan, P., L.R.C.P. Ed., &c., to be Medical Officer of Health to the Hamilton District, Tas.

Reid, W. H., M.B., &c., to be a Resident Medical Officer of the Sydney Hospital.

Saw, A. J. H., M.D., &c., to be a member of the Dental Board for Western Australia.

Sheldon, H., M.B., &c., to be a Resident Medical Officer of the Sydney Hospital.

Stacey, H. S., M.B., &c., to be a Resident Medical Officer of the Sydney Hospital.

Sprott, Gregory, M.B., Ch.M. Glas., D.P.H., to be Officer of Health for district of Queensborough, Tas.

Throsby, H., M.B., &c., to be a Resident Medical Officer of the Sydney Hospital.

Trotman, F., M.D., &c., to be a member of the Dental Board for Western Australia.

Williams, Dr., to be Health Officer of Cookernup, W.A.

MEDICAL RESIGNATIONS.

THE following resignations are announced:—

Ames, J., M.B., &c., as a Public Vaccinator at Bendigo, Vic.

Cory, Wm., M.D., &c., as Officer of Health for Creswick Shire, Vic.

Flint, F. S., L.R.C.S., &c., as a Public Vaccinator in S.A.

Johnston, A. A., L.R.C.S., &c., as Public Vaccinator at Clifton Hill, Vic.

Watson, A. E. H., L.R.C.P., &c., as a Public Vaccinator, S.A.

REVIEWS.

A MANUAL OF OBSTETRIC PRACTICE: For Students and Practitioners. By Professor A. Dührssen, M.D., late first assistant in the obstetric clinic of the Charité Hospital in Berlin. Translated and edited from the 6th edition by J. W. Taylor, F.R.C.S., and F. Edge, M.D., F.R.C.S. 37 figures. London: H. K. Lewis. 1897. 318 pp. Size, cr. 8vo. Price, 6s.

This little manual is one of the best of its kind with which we are acquainted. It is a translation of a work extensively used in Berlin and throughout Germany, where it has already passed through six editions. It is essentially a practical work, and remarkably free from irrelevant matter. It contains in a small size a safe guide for students, and a compressed reference book for practitioners to the present scientific practice of midwifery in Germany.

The table of contents is similar to that found in many works on obstetrics; that is to say, there are many chapters subdivided into the following parts:—Anatomical Introduction, Physiology of Pregnancy, Physiology of Labour; The Other Presentations, The Management of Labour in General and in the Various Presentations; Physiology of the Lying-in; Regimen of the Lying-in; Pathology of Pregnancy; Diseases of the Ovary; Untimely Birth; Pathology of Labour; Diagnosis of the various forms of Contracted Pelvis; Labour Obstructed by Abnormal Resistance on the part of the child; Pathology of the Puerperium; Obstetrical Operations; A few Rules on the Preparation of the History of a case of Labour.

The methods of antiseptics are described to their smallest details. The author is convinced of the necessity of doing this from experience in his operative course for practitioners and students. The new era of obstetrics, the surgical one, can only obtain its best results when antiseptics has become a matter of second nature to the student.

The translators are to be congratulated upon their success in placing this work before the English-speaking student. The book is deficient in illustrations, but on the whole we have no hesitation in recommending it as a good, cheap, and well-digested manual of the scientific practice of modern obstetrics.

MASTOID ABSCESSSES AND THEIR TREATMENT. By A. Broca, M.D., and F. Lubet-Barbon, M.D. Translated and edited from the French by H. J. Curtis, B.S. and M.D. Lond., F.R.C.S. Eng., Assistant to the Professor of Pathology, and Assistant in the Ear and Throat Department, University College Hospital, London. With eleven coloured illustrations. London: H. K. Lewis. 1895. 268 pp. Size, cr. 8vo. Price, 6s.

The surgical treatment of the mastoid is at the present moment engaging the attention of both general and aural surgeons, not to speak of general practitioners. From year to year operations multiply, methods are perfected, the indications for them become more precisely defined, and there are better results.

The authors of the original of this work have performed 146 operations on the mastoid, these being distributed amongst 129 patients. The present volume is a translation of a memoir entitled "Les Suppurations de l'Apophyse Mastoïde et leur Traitement," which was published in 1895 after being awarded the Prix Meynot by the French Academy of Medicine in 1894. The authors having written such an admirably clear account of the subjects included under the above title, from clinical, pathological, and therapeutical standpoints, with careful descriptions in detail of more modern operations such as those of Schwartze and Stacke, it is well worthy of being translated into English. The translator is to be congratulated upon his efforts, and the publishers upon their work.

The table of contents is as follows:—Introduction; Chapter I., Mastoid Abscesses, discussed in five sections; Chapter II., Mastoid Fistulæ, discussed in three sections; Chapter III., Chronic Suppurative Inflammations of the Middle Ear, with Latent Mastoiditis; Chapter IV., Results, with Cases and Statistics.

For the convenience of English readers the scales for temperature, etc., have been reduced. There are five figures, several temperature charts, and a useful index. The work is an excellent monograph upon mastoid abscesses and their treatment. Its price places it well within the reach of practitioners and students.

RINGWORM AND ALOPECIA AREATA, THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT. By H. Aldersmith, M.B. Lond., F.R.C.S., Medical Officer, Christ's Hospital, London. 4th edition, enlarged and rewritten, with new illustrations. London: H. K. Lewis. 1897. 327 pp. Size, cr. 8vo. Price, 10s.

This is the fourth edition of this well-known work. It has been entirely rewritten, so that it forms a new book rather than a new edition. It is considerably larger than any previous edition. The publishers have executed their work well. The author has had a long practical knowledge of the diseases discussed, having gained his experience in their daily treatment for over a quarter of a century. The author states that, although the last edition has been out of print for some time, it has been necessary to defer the publication of a further one to allow time for the fair consideration and corroboration of the discovery by M. Sabouraud of "the plurality of fungi causing ringworm."

The different varieties of Tinea, all of which are as distinct from each other as favus is from ringworm, are now separately described, both clinically and microscopically. The treatment of ringworm is discussed in three chapters. The first chapter details the remedies for small places, the second those for extensive places, while the third describes minutely the "croton-oil treatment" and "croton-oil needling," first suggested by the author in 1880. The chapter on alopecia areata contains a resumé of the opinions of many dermatologists as to whether it is or is not contagious; and presents also the recent views of Sabouraud, who contends that this disease is due to the same microbaccillus as found in Seborrhœa and in ordinary baldness.

There are six figures and seven plates, and a useful index. This revised and enlarged edition upon ringworm and alopecia areata will be found most useful to all those who come across these and similar affections.

RHEUMATISM AND ITS TREATMENT BY THE USE OF THE PERCUSSO-PUNCTATOR. By J. Brindley James, M.R.C.S. Eng. 2nd edition. London: The Rebman Publishing Co., Ltd. 1897. 40 pp. Size, 8vo. Price, 2s.

This booklet is one of the second edition of the above publication. The author has now experienced, for many years the use of acupuncture (in the ordinary way and by the percusso-punctator) in the treatment of sciatica, lumbago, rheumatism, etc., and expresses himself more satisfied than ever with it. This small treatise is the development of a paper read at the annual meeting of the British Medical Association held at Cardiff some ten years ago.

The contents of the booklet are as follows:—Preface; Chapter I., Mechanism of the Percusso-punctator; II., Practical Use of the Percusso-punctator; III., Instances of Acupunctural Treatment; IV., Applicability of Acupuncture to Various Affections; V., Treatment of Sciatica and Lumbago by the Injection of Sulphuric Ether; VI., On Diet in Rheumatism; VII. and VIII., Névrose and Acupuncture—a Suggestion.

The efficacy of the treatment by acupuncture has been warmly advocated by Mr. MacNamara, ex-president of the Royal College of Surgeons of England.

The following quotation shows a little of the author's style and how he treats sciatica and lumbago by the injection of sulphuric ether:—"After preliminary dry-cupping over the seat of lesion, I inject with a subcutaneous syringe, daily, ten minims of sulphuric ether. If, in the course of a week, I find no marked progress,

I gradually increase this injection-dose up to a *maximum* of *thirty* minims. Concurrently with this external treatment, I have ever found it advisable to administer internally, (1) at the outset, a brisk purgative; (2) a mixture containing *five* grains of *salicylate of soda* in *one ounce* of *infusion of gentian*, with *ten* minims of *chloric ether* and another *ten* minims of *tincture of ginger*, every four hours. . . . In *not one* solitary case have I found this system prove a curative failure. Usually, in about a week's time, my rheumatic patients have found themselves cured. In cases of lumbago and sciatica, I have found it work more expeditious wonders still. . . ."

In the two concluding chapters, the author has a Galenical tilt at the individual and national failings which induce "névrose." This term (or, better, *neurosis*) has been invented in France to indicate the special affection of the now departing century, viz., a general tendency to a morbid hyperæsthesia.

The booklet is written in a light, airy, original, and interesting style. It needs a chapter devoted to a solid matter-of-fact description of the method and its application, the needles, their size, asepticity, etc.

The price of this small monograph places the author's views upon acupuncture within the reach of all practitioners and students.

THE THOMAS WALKER CONVALESCENT HOSPITAL, Parramatta River, N.S.W. Fourth Annual Reports to the Committee. Sydney: W. E. Smith. 1897.

We are gratified to read this, the fourth annual printed pamphlet containing the account of the successful working of this most useful charitable institution. This year the pamphlet contains 20 pages. There is a memorandum by the committee signed by the secretary at the City Office, 7 Gresham-street, Sydney, in which all those who have given their services during the year in any way whatever are heartily thanked for their kindness. After this comes the report by the visiting medical officers. Next the matron's report. Then the appendix to the visiting medical officers' report, which is a complete series of statistical tables similar to those to be found in the reports of nearly all the general hospitals in Sydney. After this appendix of diseases, we get a report from the head gardener, an extract from which we quote:—

"On June the 22nd a plant of the British oak (*Quercus robur*) was planted near the children's cottage by the matron, Miss Spencer, to commemorate H.M. Queen Victoria's record reign. On September 23rd two specimens of the New Caledonian pine (*Aracaria Cookii*) were planted by the Right Hon. C. C. Kingston, P.C., and the Hon. Sir Philip O. Fysh, K.C.M.G., members of the Australasian Federal Convention visiting the hospital."

Upon these "Arbor Days" the committee, in the memorandum above referred to, expresses the hope that the trees planted may prove long-lasting mementos of very interesting historical occasions.

In reading the report of the visiting medical officers and the appendix thereto we find that on the 30th September, 1896, there were 70 patients in the hospital; 808 were admitted during this year; making in all 878 patients under treatment. We find that 535 were discharged cured, 243 relieved, 28 unrelieved, 1 died, and 71 remained under treatment at the end of the year. The results are most satisfactory, the number of cases cured is large, and of those classified as relieved many were so much improved in condition that they might reasonably have been described as cured. There has been one death: the case was one of heart disease. As in former years, the practice of

giving admission to some apparently incurable cases has been adhered to, and, as before, completely justified by the great benefit many of them have received during their stay in the hospital. The list of unrelieved cases comprises chiefly chronic lung diseases and diseases of the brain and spinal cord, and the list is swelled by those who did not remain in long enough to derive any benefit. The cases of cancer had all been operated on before admission, and nearly all were much improved when discharged. Cases of phthisis, as also in former years, were rigidly excluded from the hospital. A large number of convalescent typhoid cases were again treated.

Altogether the reports are most satisfactory, and in our opinion reflect great credit upon all concerned in the maintenance and administration of this most excellent institution.

THIRTY-SIXTH ANNUAL REPORT OF THE N.S.W. INSTITUTION FOR THE DEAF AND DUMB AND THE BLIND. Sydney: Wm. Brooks and Co. 1897.

This pamphlet, of 86 pages, contains the report of the above institution for the year ending September 30th, 1897. A perusal of its pages convinces us that excellent work is being accomplished by the institution on behalf of the afflicted inmates. The number of pupils in attendance at the date of last report was 105. Two former pupils were re-admitted, and 22 new scholars were received; 16 were discharged or removed by their friends, leaving 113 at present on the rolls; the net increase for the year being 8. The health of the pupils has been remarkably good; no illness of any importance has occurred. The hospital has been unoccupied the whole of the year. Several afflicted children have been refused admission to the institution during the year on account of being over age. The financial result of the year's operations is not so favourable as that of last year. The expenditure has exceeded the income by £103 16s. 2d. There has been an increase of income to the amount of £134 7s. 3d., but the expenses were also increased to the sum of £510 13s. 9d. The year commenced with a credit balance of £41 7s. and terminated with an overdraft of £62 9s. 2d. The total income for the year was £4134 12s. 11d., and the expenditure was £4238 9s. 1d. The superintendent's report is satisfactory, so also the reports from the music-master and the master in drawing and modelling. The report of the examiners from the Department of Public Instruction is also satisfactory, stating, as it does, that "the pupils are making satisfactory progress in their studies, the teachers are attentive to duty, and efficient, and the general management of the school is in the highest degree creditable to the superintendent and his staff of workers." The report contains some specimens of composition by the inmates, the subject being the record reign of H.M. the Queen. These specimens, when one considers the affliction and the age of the writers, are excellent.

In bringing the institution under the notice of the medical profession, the directors desire them to bring before parents and guardians of children afflicted with deafness or blindness the following information:—(1.) That this is an institution where their blind or deaf children can be educated, and so trained that in after life they may be able to support themselves; (2.) that the institution is open to all classes of society, both rich and poor, and that school fees are charged only according to the circumstances of the parents; (3.) that deaf or blind children from 7 to 14 years of age are eligible for admission, and that the sooner such children are sent after reaching the age of seven years

the better; (4.) that the institution has room for more pupils, and the directors are anxious that every deaf and every blind child in the colony, capable of being educated, should enter the institution and participate in the benefits which it confers; (5.) that the institution is not an asylum, but an educational establishment for deaf or blind children only.

As the institution is dependent to a large extent on the generosity of the public for the necessary funds with which to carry on this good work, an earnest appeal for subscriptions is now made.

NOTES ON MALARIA IN CONNECTION WITH METEOROLOGICAL CONDITIONS AT SIERRA LEONE. By Surgeon-Major E. M. Wilson, C.M.G., lately Senior Medical Officer at Sierra Leone. London: H. K. Lewis. 1897.

This little pamphlet consists of tables which were undertaken with a view to ascertaining what effect, if any, was produced by the various meteorological conditions on the malarial fevers, endemic in Sierra Leone. Surgeon-Major Wilson puts forward his conclusions which he explains by means of these tables:— I. Each Battalion of the West India Regiment suffers exceptionally from fever the first year of its service on this coast. II. The white troops suffer much more in proportion than the black. III. The largest number of cases occur in the middle of the rainy season, in the period of the greatest rainfall and of highest relative humidity, and lowest temperature in the shade, i.e., July and August. IV. The smallest number of cases occur, broadly, in the period of least rainfall, least relative humidity, and greatest heat. V. The most important factor in influencing the disease appears to be, not the rainfall itself, but the relative humidity of the atmosphere. VI. The black troops are more affected by changes in the meteorological conditions than the white. VII. The case mortality is small at all periods.

ARCHIVES OF THE ROENTGEN RAY (formerly Archives of Skiagraphy). Edited by W. S. Hedley, M.D., M.R.C.S., in charge of the Electro-Therapeutic Department, the London Hospital, and Sydney Rowland M.A., M.R.C.S., &c. London: The Rebus Publishing Company, Ltd. Vol. II.—No. 1. July, 1897. Price, 4s. net.

This is the first number of the second volume of the well-known "Archives of Skiagraphy." The title has been changed out of compliment to the discoverer of the mysterious X rays. It is now the organ of the recently-formed Roentgen Society. It will deal with "the new radiation," not only in view of its practical usefulness, but from the still wider standpoint of its scientific bearings.

Professor Sylvanus Thompson, F.R.S., writes *On the Nature of Roentgen's Rays*. Then follows an account of the first general meeting of the Roentgen Society, and Dr. Hedley writes a long article on *Roentgen Rays*. The plates comprise illustrations of a fractured olecranon, an entire adult body, a case of phthisis, vesical calculus, and others of interest. These illustrations are exceeding clear and instructive.

"Acute Gastric Ulcer—Perforation—Operation—Recovery," by R. Humphrey Marten, M.B., B.C. Cantab., M.R.C.S., L.R.C.P. Lond. (Adelaide), as published in the *Australasian Medical Gazette* for September, is quoted from in the December number of *Medicine*.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following gentlemen, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Foley, John Edmund, Lic. R. Coll. Phys. Edin. 1894, Lic. R. Coll. Surg. Edin. 1894, Lic. Fac. Phys. et Surg. Glas. 1894.
Magnus, Frank Douglas, M.D. National Univ. Washington, D.C. U.S.A., 1895.

For Additional Registration:—

Kirkland, Thomas Speirs, M.D. Univ. Glasg. 1896, Fell. R. Coll. Surg. Edin. 1897.

TASMANIA.

MacCarthy, Charles Edward De Lacy, M.B. Trin. Coll. Dub. 1873.

WESTERN AUSTRALIA.

Anderson, Thomas Lynewolde, M.B. Melb., 1896.
Smeaton, Bronte, M.B. Adel., 1896.
Nix, Herbert William, M.R.C.S. Eng. 1890, L.R.C.P. Lond. 1890, M.B., B.Ch. Camb. 1891.

NEW ZEALAND.

The following have applied for registration:—
Brewis, Edward James, M.B., B.S., Univ. Durham 1894, M.D. 1897.

Irving, William, M.R.C.S. Eng., L.R.C.P. Lond. 1896, M.B., B.C. Cantab. 1897.

De Renzi, Henry Carter Castriot, M.R.C.S. Eng., L.R.C.P. Lond. 1891.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS

BATEMAN.—On the 28th December, at her residence, Ravensthorpe, Albion Park, N.S.W., the wife of Dr. Arthur W. Bateman, of a daughter.

FAITHFULL.—On the 2nd December, at Wilga, Potts Point, Sydney, the wife of R. L. Faithfull, M.D., of a daughter.

LAMROCK.—On the 11th January, at Lauriston, Waverley, N.S.W., the wife of Leslie James Lamrock, M.D., of a daughter.

LEVY.—On the 9th December, at Church st., Newtown, Sydney, the wife of Dr. A. Lewis Levy, of a daughter.

MARRIAGES.

BUCHANAN—GAMBLE.—On the 17th November, at Scots Church, Collins street, Melbourne, by the Rev. Dr. Alex. Marshall, M.A., James S. Buchanan, M.B., F.R.C.S., of Collins street, younger son of Mr. and Mrs. Robert Buchanan, of Berwick, to Elfreda H. Gamble, M.B., Ch.B., second daughter of Mr. and Mrs. Walter M. Gamble, of Phoenix, Charles street, Prahran, Vic.

BUTCHART—CHAPPLE.—On the 17th Nov., at St. Andrew's Church, Middle Brighton, Melbourne, by the Rev. Reginald Stephen, John Elder Butchart, L.R.C.P.E., to Maud, daughter of the late R. Chapple.

GIBBS—MELL.—On the 15th Dec., at St. Paul's Church, Germantown, N.S.W., by the father of the bride, assisted by the father of the bridegroom, Alexander Edward Gibbs, M., Ch.B. (Adel.), second son of Rev. G. E. Gibbs, incumbent of Kiama, to Grace Marion, elder daughter of Rev. T. E. Owens Mell, incumbent of Germantown.

MCDONAGH—AMORA.—On the 4th Dec., at St. Joseph's Church, Woollahra, Sydney, by the Rev. T. Fitzgerald, O.S.F., John McDonagh, B.A., M.D., M.R.C.P., F.R.C.S., eldest son of the late Dr. McDonagh, of Sydney, to Anita J. Amora, eldest daughter of Senor Don J. Horatio Amora, of Sydney.

SHELDON—DALTON.—On the 26th October, at St. Mary's, North Sydney, by His Eminence Cardinal Moran, Mark, eldest son of W. Sheldon, M.D., North Sydney, to Blanche Mary, daughter of the Hon. Thos. Dalton, M.L.C., Wheatleigh, North Sydney.

STUDDY—PLUMMER.—On the 18th Dec., at St. Anne's Church, Strathfield, Sydney, by the Rev. H. J. Rose, W. B. Studdy, M.B., Ch.M., second son of the late A. H. Studdy, Esq., of Summer Hill, to Alice M., second daughter of James Plummer, Esq., Highclere, Burwood.

DEATHS.

BROWN.—On the 16th December, at Parramatta, N.S.W., Walter Brown, M.D., aged 76 years.

COOLEY.—On the 16th December, at Campbelltown, N.S.W., Ida, the beloved wife of Alfred Glover Cooley, M.R.C.S., aged 21 years.

RADIE.—On the 24th December, at Sah Luma, Balasclava, Vic., Florence Amelia, aged 36 years, the wife of Dr. James Radie.

MCMASTER.—On the 7th January, at Woodside, Goulburn, N.S.W., Constance, wife of R. D. McMaster, aged 37.

PARRY.—On the 24th December, at Murrumburrah, N.S.W., Annie, wife of Dr. L. Davenport Parry, aged 34.

PARRY.—On the 9th January, at Murrumburrah, Francis Archibald, infant son of Dr. L. Davenport Parry, aged 6 months.

FOUND.—On the 1st December, at Hook, Hampshire, England, Dr. F. J. Found, of Suva, Fiji.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS.

DELIVERED AT THE ANNUAL MEETING OF THE
QUEENSLAND BRANCH, B.M.A.,
By E. H. O'DOHERTY, L. ET L. MID. K.Q.C.P.I.,
L.R.C.S.I., BRISBANE.

GENTLEMEN,—There are so many Presidential addresses delivered every year that one finds rather a difficulty in selecting any new subject that would be of interest to the members.

On looking over one of the journals the other day I came across a very interesting article by Dr. Manson, of University College, London, on tropical medicine and the necessity for a special course of such for the medical men intending to make their home in a tropical climate. The idea is a most practical one. It struck me forcibly how much behindhand the people here were in some of the important diseases almost peculiar to their own country, and what little effort is being made to make them aware of some of the dangers to which they are exposed, and which are to a great extent preventable. Take, for instance, first,

Anchylostomiasis, because I believe it is one of, if not the most recent we have had to contend with.

In 1895 Dr. Lawes, at that time a medical officer of the Brisbane Hospital, and also at one time of the Children's Hospital, read a very interesting paper on the subject before the Queensland Branch of the British Medical Association.

Dr. Turner and Dr. Ashworth have also contributed most valuable papers. These cases were nearly all found in children, although Dr. Hogg, who was one of the medical officers in charge at Goodna, mentioned a case of an adult who died in the asylum, in which the worms were found *post-mortem*.

The most prominent symptom of the disease was anæmia of a most profound kind, quite unlike any of the ordinary cases. A good many of these cases were kept under observation at the Children's Hospital, and notwithstanding the use of all the approved drugs the majority of the cases ended fatally.

In some articles written upon tropical disease mention was made of this, and particular stress was laid upon the importance of examining the stools. It was on making a microscopic examination that the ova were found, and thus the diagnosis was established.

Having ascertained so much was of course satisfactory, but then came the important mat-

ter of treatment. Nothing so far seemed to be effectual. Iron was tried in many forms, anthelmintics, &c., but they were of no avail. Thymol was tried in ordinary doses, but to Dr. Turner belongs the credit of finding that by large doses he had succeeded in, at any rate, expelling the worms. Seven of these cases were found in Nudgee Orphanage. They were all sent to hospital, and did very well under the Thymol treatment. In the first instance the police had taken charge and sent them to the orphanage for protection, as they were ill-fed and apparently had been quite neglected, the disease being, I believe, peculiar to children of that kind.

I was fortunate enough to be present at a *post-mortem* made by Dr. Lawes on the body of a boy *æt.* 11 years, at the Brisbane Hospital, in 1895.

The first thing that struck one was the general marked anæmia. On opening the abdomen and examining the duodenum dozens of these little worms were found stuck to it like leeches, and one had to use a certain amount of force to detach them. These little bloodsuckers are called *anchylostomum duodenale*, and are, I believe, almost peculiar to that portion of the intestine, although some are found in the jejunum.

Another disease, which is not in any way new to us, is "*Filaria Sanguinis Hominis*."

To the late Dr. Joseph Bancroft we are indebted for the discovery of the disease in this colony. He found the parent worm, and his name will always live in medical history in connection with it (*Filaria Bancrofti*).

Dr. Jackson some years ago wrote a very interesting paper, and Drs. Thomas and Peter Bancroft have also contributed most valuable articles on the subject.

There is not a gentleman present who has not come across many such cases in all their different forms. We know the cause, *viz.*, impure water; and we also know that it is extremely common both in children and adults from Brisbane to the northernmost part of Queensland, and yet I am quite satisfied that if you asked a layman there is not one out of every ten that could tell you what filaria means.

Allowing people to remain uninformed on matters of such importance is the mistake. Why do so when much harm can be prevented by enlightenment? So much has been already written about this now rather too common disease that I have nothing original to add.

We all know its different symptoms, and what measures each of us found most effectual, but I maintain that sufficient stress is not laid upon matters of such vital importance. Water seems to be an important element in the causation of different worm diseases, for besides those that I have already mentioned there is yet another which is just as grave.

I refer to Hydatids, the name of which is known all over Australia.

Here many of our leading men have contributed noticeable articles on the subject. Dr. Æneas McDonnell has compiled some valuable statistics regarding it, and a great deal has been written about it in all the other colonies. In Victoria at some of the public places, such as railway stations, &c., notices are posted warning the public of the dangers of the disease, and offering suggestions for its prevention. So much has been written that any remarks from me would only mean repetition.

While on the subject of water I cannot omit mentioning a most interesting paper, read a few months ago by Dr. Turner before the Queensland Medical Society, upon some cases of lead poisoning occurring in the children of Queensland.

He clearly demonstrated them, and suggested the drinking of tank water as a probable cause. However, Mr. Henderson, the city analyst, at the request of the members, has kindly undertaken a careful examination, and we await the result with great interest. Many cases that were hard to account for would be explained away if the doctor's theory is correct, and, knowing as we do his particularly careful work, we must attach great importance to anything he may write.

My main object in glancing thus lightly over a few of the diseases existent here, most of which are but little known except to medical men, was to call special attention to a society that was formed in Victoria as far back as 1875. It was named "The Australian Health Society." Among the members were many influential men of all professions. The objects were threefold:—

Firstly, to create an educated public opinion with regard to sanitary matters in general by the aid of the platform, the Press, and other suitable means.

Secondly, to induce and assist people by personal influence, example, and encouragement to live in accordance with recognised laws, whereby health is maintained and disease prevented.

Thirdly, to seek the removal of all noxious influences deleterious to the public health, and to influence and facilitate legislation in that direction.

In addition to this there was a special note—"That the Council of the Australian Health Society would gladly welcome aid in support of the above objects.

"A dense mass of ignorance exists in matters affecting personal, domestic, and public health. The Society's mission is to endeavour to remove it. It has been well said that the health of the people is the wealth and the strength of the nation. The qualities called into exercise by the care of health are those which tend to build up a nation strong in every sense. The Society is supported for the people by the people."

Now, gentlemen, the fact of it having existed for the last twenty-two years is to my mind sufficient proof of its success. There is no manner of doubt that such a Society would be a distinct benefit here. The remark about "the dense mass of ignorance in matters affecting public health" we all know is only too true.

The education, too, of public opinion is of great importance. If the general public were better informed by properly qualified medical men, and made to more fully realise the dangers of ignorance, they would be much less liable to be so shamefully victimised in the many ways that we know are occurring nearly every day in our midst.

I consider the formation of such a Society most desirable. Let us form a Branch here. There would be no doubt of its success, and I feel quite sure that it would go a long way towards educating the people in a proper way, and would probably save them the further expenditure of money, often hardly earned, that has hitherto been going into the pockets of quacks and adventurers.

Such a Society would, I feel sure, do good in many ways, but even if only in the way mentioned it would be a source of some satisfaction.

It would be hard to estimate the amount of money the poor misguided public have been robbed of by such means.

I fear, gentlemen, that my remarks do not deal extensively enough with the important subjects I have brought under your notice, but in so necessarily limited a space fuller details might be considered tedious and unnecessary, and I should only succeed in boring you most thoroughly.

My year of Presidency concludes this even-

ing, and I beg to thank you all most sincerely for your consideration to me during my term of office. The real *hard* work of the Branch has fallen upon our secretary. How he has worked there is no necessity for me to say, for we are all well aware of the fact.

I have to thank the Council for their loyal assistance in every particular. There is a steady increase in the number of members, thirty-six having been added within the last two years.

The Branch is, I believe, doing good work, and on three or four occasions when matters of general interest to our profession have arisen meetings of a most friendly and satisfactory nature were held, in which the Queensland Medical Society and our own Branch took part, the result always being to our mutual advantage.

I need not say that such a state of things was gratifying, and goes a long way to show that in all matters which affect the profession generally we are united.

Again, gentlemen, I thank you for your consideration.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrsman, R. Bohrsman, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Forbes (Ashfield), Tayler (Woollahra), Scott (Balmain), Anderson (Petersham), Patrick (Marrickville), R. H. Collins (North Sydney). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Davenport (North Sydney), Brereton (Marrickville).

"TABLOID" CHEMICAL FOOD (PHOSPHATES COMPOUND).—This "tabloid" overcomes all the objections which have been raised to the syrup or fluid form of this valuable combination of the phosphates of iron, calcium, potassium and sodium. There is no difficulty in securing its administration regularly and without objection on the part of young or sensitive patients. The dosage can be regulated with exactness, since each "tabloid" contains an accurately adjusted quantity of each of its ingredients. "Tabloid" Chemical Food is easily taken because of its small size and sugar-coating. It is suited for continued administration, because it is well borne by those suffering from sensitive digestive organs. It is of special value for children suffering from anaemia, rickets, and for such as are thin and pale without apparent cause, and it has been advocated for continued administration during the period of second dentition. A marked advantage possessed by "Tabloid" Chemical Food over similar combinations in fluid form is that it does not stain the teeth. "Tabloid" Chemical Food (Phosphates Compound) is supplied in two sizes—2½ gr. and 5 gr.—representing ½ and 1 dram of a standard compound Syrup of Phosphate of Iron. Each size is supplied, sugar-coated, in bottles of 25 and 100. (B. W. & Co.)

RETIRING ADDRESS.

DELIVERED ON THE 13TH JANUARY, 1898.

BY J. IRVING, M.D. EDIN., M.R.C.S. ENG., PRESIDENT OF THE CANTERBURY SECTION, N. Z. BRANCH, B.M.A.

GENTLEMEN,—I should feel that I was guilty of a great dereliction of duty if, upon vacating the Presidential chair for a third time, I was to omit to thank, most sincerely, those members of the Committee whose unremitting attention to their duties, always arduous, often difficult, and which, we hope, are about, *inter alia*, to culminate in satisfactory legislation for the benefit of the whole of New Zealand, have enhanced the pleasure of office, and relieved me of much labour and anxiety. Some three months ago, our indefatigable Secretary gave us a resumé of the work of the Society during the previous nine months. Since then, the work of the Committee has been very much increased, in consequence of the assistance of the Medical Society being sought by the Honorable the Premier in the drawing up of a new Medical Registration Bill, and also in the setting forth of a new C. D. Act.

Some of the older members of this Society will remember that the original act was called the "Contagious Diseases Women's Act," to distinguish it from other "Contagious Diseases Acts" which applied to other subjects. Since the passing of that Act women have ascended to a much higher platform, and, as I think very properly, they are still ascending.

In the Bill we have drafted, the words "Women's Act" will be omitted, for we propose to make it applicable to both sexes, thus differing very materially from the House of Commons which passed the old Act, mainly, it is to be feared, for the protection of the one sex, to the utter and most un-Christian and unprincipled disregard of consequences to women and their offspring. Such shortsighted and suicidal legislation, we hope, is now entirely of the past, and that the New Zealand House of Representatives will show to the world that New Zealand is at all events ahead of the mother country in these matters. Moreover, some so-called "barbarous nations" have instituted legislation touching these things which should put many European nations to the blush, particularly the one which we are all proud to belong to. In our labours in this direction, I wish gratefully to acknowledge the able and untiring assistance which the Committee have received from other members of the profession, and especially from Dr. Symes. Were anyone inclined to doubt the benevolence of the medical

profession (bearing in mind the derivation of the word), there is, I think, ample proof of it in the legislation which has, mainly during the last thirty years, been advocated, and, generally, successfully, by medical men for diminishing and stamping out diseases amongst our fellow men.

Gentlemen, we have had the pleasure of seeing the New Zealand Medical Society converted into a branch of the B.M.A., and during my term of office, now expired, many things have been done to consolidate the Society, and to increase its popularity with the profession, and extend its usefulness.

In conclusion, I beg to thank, very sincerely, all those members of the Society who have been instrumental in furthering the interests of the Association, and for the loyal support you have given to your President. I have occupied an honourable position, to which you elevated me, with pleasure to myself, and, I hope, with satisfaction to you. I vacate the chair, in favor of my successor, Dr. Pairman, with regret, but with every confidence that the interests of the Society will be safe in his hands, and I sincerely hope that you will afford him the same loyal support which it has been my privilege to receive at your hands.

The announcement in Monday's telegrams of the death of Mr. Ernest Hart has caused a pang of sorrow to us all, and to many thousands of medical men; doubtless others more capable of doing justice to his great attainments and huge category of good works will allude to his early death, which is not only a great loss to the profession, but to the public at large; but he leaves behind him an enduring monument of intellectual work and scientific attainment, doubtless far more gratifying to himself than the most sumptuous monument which admiring friends and the grateful public could erect over his ashes, for he was a member of the Cremation Society, and one of its founders.

The remainder of Dr. Irving's address dealt with the important subject of cremation, and is published in the *Christchurch Star* of January 19, 1898. The arguments for and against this mode of burial are duly set forth, and a strong plea is put forward for the establishment of a crematorium in New Zealand.

The *Lancet* of December 18th, under the heading Australia, contains a précis of papers contributed to the *Australasian Medical Gazette* for October last, on "Lead Poisoning among Queensland Children," by A. Jefferis Turner, M.D. Lond., Brisbane; and "Ocular Neuritis simulating Basal Meningitis—Plumbism," by J. Lockhart Gibson, M.D. Edin., Brisbane.

In *Medicine* for January, 1898, reference is made to an article which appeared in the *Australasian Medical Gazette* of September last, by R. A. Stirling, L. et L. Mid., R.C.P. et R.C.S. Edin., etc., on "Spontaneous Gangrene of the Testicle."

GASTRIC ULCER AND SECONDARY PAROTIDITIS.

BY F. S. HONE, M.B., B.CH. (ADELAIDE),
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SINCE Murchison was so struck by the prevalence of the parotid bubo and other glandular inflammations in the course of typhus, that he spoke of that disease as "the plague in modern times," the occurrence of parotiditis has been noticed in most of the acute infectious diseases. It has been recorded in cases of smallpox, scarlatina, and more frequently in enteric fever.¹ In diphtheria, the parotid sometimes suffers in addition to the sub-maxillary, "in rare cases sufficiently to resemble the swelling of mumps."² Ziemssen, Paget³ and others give it as a possible complication of influenza, while cases are recorded in pneumonia following influenza,⁴ and by Griseb,⁵ on five occasions in five thousand cases of pneumonia, whether of influenzal origin or not.

Quite apart from these cases where the system is charged with a poison of one sort or another, it has been noticed of recent years that parotitis comes on with some degree of frequency in injuries and diseases of the abdomen and pelvis. Attention was directed to this fact through the occurrence of this complication after oöphorectomy and ovariectomy, and one still hears of it chiefly in connection with pelvic disorders. Yet it certainly occurs in other abdominal disorders; and Stephen Paget, who some ten years ago collected 101 cases that had come on in the course of abdominal and pelvic troubles, was able to classify them as follow⁷ :—

- 50 following injury or disease of the generative organs (or temporary derangement like slight injuries, menstruation, &c.).
- 10 following injury or disease of the urinary tract.
- 28 following injury or disease of the abdominal wall, sub-peritoneal cellular tissue or peritoneum.
- 18 following injury or disease of the alimentary canal.

I must confess that, in spite of a general knowledge of these facts, I was not aware of parotitis as an actual complication of gastric ulcer, till the occurrence of a case recently under my own observation led me to look up the subject. And the fact that even now, after considerable search, I can find no mention of such a possibility in any of the articles on ulcer of the stomach, in any of the leading textbooks, may perhaps serve as an excuse for my ignorance.

The following are the notes of the case which directed my attention to the subject :—

Miss M., *æt.* 39, had an attack of hæmatemesis on June 6th, in which she threw up about a cupful of bright blood, partly clotted. Drove up to see me immediately afterwards, and appeared none the worse. Stated that she had had rather a bad attack of indigestion for a week previous, with a good deal of epigastric discomfort, but no severe pain. Had felt sick, but had not vomited till that morning. Had suffered from hæmatemesis about six years before this. Was laid up for three weeks afterwards, during part of which time the stools were tarry. Since that, had suffered from frequent attacks of indigestion, lasting a week or more. From other statements, she had evidently been over-taxing her strength for some time past, and for the last three months had been considerably run down. She was thin and anæmic, but, on examination, showed no signs of any liver derangement or appearance of cachexia. There was epigastric tenderness, but no lump, and physical examination was otherwise negative. She was put to bed, with nothing by mouth but a gastric sedative; but next morning, about four o'clock, had a return of hæmatemesis, and, by the time I reached her, had thrown up over a pint of blood, some black and some fresh, and had also passed some fresh blood per rectum. The vomiting stopped after two doses of Hazeline and Ergot, but flatulence troubled her a good deal for a day or two. Her general condition remained very good, considering the reduced state of her health. Pulse, 104-108 in morning; dropped by night to below 100, and remained so, and temperature kept normal. She was fed solely by nutrient enemata till June 12th, which she retained well. Bowels were moved by enemata, and stools were tarry. On June 13th, she had a little peptonized milk, and this was increased gradually daily till June 16th, during which time she rapidly gained strength, and was anxious to get up. On June 16th, following over-excitement, she had another attack of hæmatemesis, and (through a mistake on the part of her attendants) was not given the mixture I had left in case of such an accident. By the time I reached her, the bleeding had been going on for over two hours; and, though it was soon checked afterwards by the usual remedies, she had lost a great deal of blood, and was in a very low state—bloodless, and inclined to be restless, with a pulse going from 130 to 140 per minute, and very irregular. Her general condition was so low that I did not expect her to live till morning; but, after subcutaneous and rectal injections of saline solution,

and the usual treatment in such cases, she rallied slowly, and next day was better in every way. Each day subsequently saw a great improvement. Her pulse improved daily, and was soon under 100 again. Temperature remained normal or sub-normal; strength improved; pain in epigastrium disappeared, as did tenderness; abdomen was flat; bowels opened by enema. She complained a good deal at first of her mouth and tongue being dry, and her tongue was glazed and dry; but, with ice to suck, and frequent use of a mouth-wash of Boric Acid and Pot. Chlorate and Glycerine, this gave her very little trouble. Her condition was now all that could be desired, and we were going to start feeding by mouth again, when on the evening of 23rd June I noticed her pulse had risen to 108, and feared recurrence of hæmorrhage. Shortly after I left, she complained of pain in right side of jaw; face began to swell; temperature rose to 100°, and she was slightly delirious. Next morning there was a well-defined swelling of R. parotid, which was very painful and tender. Temperature was down by that evening, and swelling gradually became more localised, and seemed to be lessening, but pulse remained rapid, and nutrient enemata were not retained so well. Though we tried to give nourishment by mouth as much as possible, the difficulty of swallowing, combined with pain and discomfort of swelling, dragged down her strength, and there could be no doubt she was going down hill. On the 27th, the left parotid began to swell. Temperature rose to 100°, and strength now rapidly failed. I put a knife into R. parotid, but could only get a speck of pus. During the next twelve hours her strength rapidly failed, and she died next day of asthenia. There was no post-mortem.

Such a complication of gastric ulcer appears to be uncommon. At the same time, after a good deal of search, I have found eight other cases recorded, which point to it being a definite complication of this condition. In the 101 cases mentioned above as having been collected by Stephen Paget, one was said to have suffered from gastric ulcer; but, as she also had vaginitis, inflamed piles, and two bed-sores, the parotitis cannot be definitely put down to the ulcer of the stomach.

Through the kindness of Professor Watson, I was directed to a paper in the *Glasgow Medical Journal*, where Hawthorne⁸ records two cases supervening on gastric ulcer, as well as one after tapping the abdomen for ascites, consequent on aortic disease and amyloid changes in liver. In the first of these there was free hæmatemesis, coming on after three weeks of

epigastric pain and almost constant vomiting. The stomach symptoms subsided with rest in bed and absence of solid food; but a fortnight afterwards a R.-sided parotitis came on (with temperature of 101° for forty-eight hours), which disappeared without suppuration.

In the other there had been hæmatemesis for twenty hours before admission, which recurred three days after, with mæna, and four days later parotitis appeared on R. side, which suppurated, was incised, and subsided, as did gastric symptoms. It is not mentioned in either case if strict rectal feeding was resorted to: from the mention of solid food in the first case, I imagine not.

There are in all five other cases recorded in the *Lancet* of 1891. Writing on December 12th, a correspondent⁹ records three cases only as having been seen in six years at one of the London hospitals, during the strict treatment of gastric ulcer by rectal feeding. All these cases were unilateral. There was some pyrexia in all, and in one severe constitutional disturbance and suppuration. He advances the theory that they arise from decomposed food and dryness of the mouth.

Nicholson,¹⁰ a week later, gives a case in which nutrient suppositories were given for two days, with ice only by mouth. Then peptonized milk was allowed. Two days later, bleeding recurred, and rectal feeding was resumed; but in two days again half an ounce of milk and soda was allowed every half hour; and after two days on this diet, the parotid was swollen. He adds that in this case the mucous membrane was never dry.

A week later, two other cases are recorded,¹¹ both after severe hæmatemesis, and both fed strictly per rectum. In the first of these there was a double parotitis, and the patient died; but at the post-mortem no sign of an ulcer could be discovered in the stomach, and the source of the bleeding was not found. In the other, there was a violent attack of hæmatemesis, for which rectal feeding was resorted to; but there were four further attacks of bleeding, which left the patient very weak, and on the tenth day double parotitis developed, with a temperature of 105°, and suppuration followed on both sides.

From the above cases, it would seem that parotitis, though possibly an unusual, is a definite complication of gastric ulcer, or, at any rate, of hæmatemesis; that it may be unilateral or bilateral; may appear a few days or a fortnight after the hæmatemesis; may be accompanied by slight or severe constitutional symptoms, and may resolve or end in suppuration. In all these cases this is the only sign of sepsis

present, and where death occurs it is without septic symptoms, but apparently from exhaustion. Further, in the above cases it appears that this complication appeared sometimes after prolonged rectal feeding, sometimes apparently after mixed feeding, and sometimes where the patient was merely restricted to fluid food. I call attention to this because, although none of the text-books mention such a complication under gastric ulcer, yet in Allbutt's "System of Medicine," in the short article on "Secondary Parotitis,"¹² the author gives in the list of diseases in which this has occurred, "gastric ulcer, especially where rectal feeding has been resorted to"; and further on, in discussing the origin of the condition, says, "In some cases, at least, it is probably to be sought in the diminution of the secretion of the saliva, caused by the absence of buccal stimulus. Its frequency in the prolonged rectal feeding, necessary in severe cases of gastric ulcer, points to this."

There are here two statements that I should like further light on. First, the writer implies that the complication is a frequent one in gastric ulcer, where rectal feeding is resorted to; while all I have been able to find points rather to the reverse. Secondly, if parotitis is frequent owing to rectal feeding for gastric ulcer, is it equally frequent in rectal feeding for other reasons, and have we to bear in mind the possibility of this complication whenever we resort to rectal feeding? I have hitherto seen no notice of such a danger, and should be very glad to hear if there are any grounds for such a statement.

Personally, it seems to me that the above cases are against such a view, as the parotitis seems to have come on irrespective of the nature of the feeding. The only feature common to all the cases is free hæmatemesis. I do not know of any instance of parotitis recorded in cases of gastric ulcer where there is no marked hæmatemesis, and think possibly the hæmatemesis may predispose to the condition by its effect on the general condition of the patient.

As a matter of fact, the cause of this complication in gastric ulcer, and indeed, in most of the other cases where it arises, is still a matter of uncertainty, and four or five theories have been advanced to account for it, none of which appear entirely satisfactory.

It should be mentioned, in passing, that parotitis has arisen in other affections of the stomach and alimentary canal, and there is no reason to suppose its cause in gastric ulcer is in any way different from its cause in these other

complaints. In Paget's list (mentioned above) cases were recorded after gastrotomy and gastrotomy, ulcer of duodenum, enterostomy, herniotomy, hepatic abscess, abdominal cancer, typhilitis, colotomy, removal of abdominal or umbilical tumours, penetrating wound of abdomen, peritonitis, division of stricture of rectum, and operation for hæmorrhoids.

Jonathan Hutchinson¹³ records a case following rupture of the duodenum; and besides Paget's twenty-eight other cases of injury to abdominal walls or peritoneum, there are others recorded of abdominal injury, including one¹⁴ followed by obstinate vomiting, which only ceased when parotitis supervened. It is possible, too, that its greater frequency in enteric fever may be partly due to the intestinal lesions that are found in this disease.

The most general explanation one hears given of these cases is that they are in some way septic in origin, and arise from the entrance of septic organisms into the system. It is certain that the parotid may be secondarily affected in a general pyæmia and in septic conditions of the uterus, and that probably its inflammation in the infectious fevers may be due to this cause. It is also true that in none of the above cases can one absolutely exclude the possibility of the entrance of microbes; but, nevertheless, the cases do not seem to fall under this category. They can hardly be part of a general pyæmia, for there is absolutely no other symptom of pyæmia. The thing that chiefly impressed me in my case was the absence of any general disturbance except just at the onset of each parotitis; and the course then was altogether that of a local inflammation. In the case of gastrotomy, the parotitis came on on the second day. Death occurred on the sixteenth day from other causes, and there was no appearance of pyæmia at the post-mortem; and so with other post-mortems. In 93 of Paget's 101 cases, the parotitis was an isolated event. In only 15 was there any mention of sepsis: they did not run the course of septic cases; they frequently ended in resolution, and when death did occur it was not apparently due specially to the parotitis.

And even if we accept the septic theory, we still have to explain why the parotid should be attacked. In infectious diseases, as in other septic conditions, we may get other local inflammations or abscesses in one case, and a parotid abscess in another. The only other abscess formation consequent on gastric ulcer I know of is a subphrenic abscess, which modern opinion ascribes to a minute perforation in all cases.

According to Paget, a parotiditis, after injury of the extremities, is always part and parcel of a general pyæmia; but here we have a series of cases in abdominal and pelvic lesions in the great majority of which the parotitis is unaccompanied by inflammation elsewhere. Further, I have been able to find no cases of parotitis following affection of the organs above the diaphragm, except those after pneumonia, which are probably infective, and one case of a stab below the clavicle, which was followed by peripheral neuritis, and this by parotitis.¹⁵

This has led to the idea that there is some obscure relation between the parotid and the abdominal and pelvic viscera or peritoneum; and the theory has been advanced that the parotitis arising after all abdominal and pelvic lesions is due to some reflex nervous influence. As regards the pelvic lesions, there can be no doubt that there is some such influence at work, especially as in many of them there is no apparent possibility of a septic origin; but the proof is not so strong for other abdominal cases, though the inference is that, being the same in all other respects, they have the same origin. We know that there is some nervous connection between the parotid and the generative tract, from the occurrence after a primary parotitis of a secondary orchitis, and less frequently ovaritis.¹⁶ Similarly, a parotitis has occurred after a primary orchitis, whether that be due to injury¹⁷ or gonorrhœa.¹⁸ Cases are recorded where first one and then the other parotid became enlarged at the beginning of successive pregnancies,¹⁹ where parotitis alternated with menstruation,²⁰ where it followed the introduction of a vaginal pessary,²¹ and another where it alternated with polyuria.²² And when of Paget's 50 cases secondary to affections of the generative organs, 27 are after oöphorectomy; when Moricke records 200 cases of ovariectomy, five of which are followed by parotitis, although he had none after any other operation, it makes it almost certain that in most cases of disease of genito-urinary tract, this complication arises from some nervous influence rather than from sepsis.

Many would ascribe all cases after abdominal affections to the same cause. Stephen Paget is a strong advocate of this view, and, especially in connection with intestinal lesions, points out "that there are many reasons for believing that the reflex nervous system may in part be a cause of this parotitis. The influence of the nervous system on the salivary glands, both reflex and direct, is familiar to all. Panlow has found that, if a loop of intestine be kept drawn out from the abdomen of a dog, the action of the

gustatory nerve is inhibited, and the secretion of saliva checked or arrested till the loop of intestine is put back. . . . If the same lesion produces salivation in one patient, arrest of salivary secretion in another, and swelling of glands in a third, must we not conclude that they are different workings of the same agent?" He would put it down to "a reflex vaso-motor constriction of the arteries of the gland itself, which may be followed by a reaction going on to parotitis."²¹

But this, again, is not entirely satisfactory. No clue is given to what brings about the reaction in certain cases; and if this nervous influence were the sole factor, we should expect the complication to be much more frequent than it is, seeing that if this influence exists in one case of abdominal disturbance, it must exist to a greater or less extent in all.

The latest theory is to refer the origin of the condition to the mouth,²³ and to ascribe it to an extension of inflammation along Steno's duct to the gland. Propounded at first for those cases, as in infectious fevers, where there is an abnormally dry state of the mouth, supporters of this theory would go further, and assert that in all cases the parotitis is due to the entrance of micro-organisms from the mouth, with consequent inflammation of the duct and gland. They assert that in most cases there is dryness of the mouth to start with, which would favour the entrance and growth of the microbes, and that pressure over the gland from the first will cause a drop of pus to exude from the mouth of the duct²⁴; and they appeal to the cases published by Jonathan Hutchinson²⁵ and others,²⁶ of Xerostomia, where an abnormally dry condition of the mouth is accompanied by repeated swellings of the parotid. But Hutchinson himself ascribes the condition of Xerostomia primarily to some nervous derangement, and quotes a case alternating with polyuria, and another where the condition came on acutely after rupture of the duodenum as one among other marked nervous phenomena.

Paget also objects to this theory, on the ground that in the cases he dissected the socia parotidis was not markedly or primarily affected, as would be expected if the inflammation spread along the duct. And there is the further difficulty that, if a dry septic condition of the mouth were the sole cause, we should expect parotitis to be much more frequent in severe and protracted cases of fever than it is; whereas I have seen much fouler and more parched conditions of the mouth and tongue, both in typhoid and gastric ulcer, than in the two cases of these diseases where I have seen this complication. There is

also the objection—common to all theories, but most weighty in reference to this—that an inflammation of the submaxillary has hardly ever been recorded in these cases, while in diphtheria, where the septic state of the mouth probably does cause the inflammation, it is more frequent than parotitis.

Seeing that the cases of Xerostomia are primarily nervous in nature, and that there seems to be some obscure nervous relation between the parotid gland and abdominal organs, may it not be possible that in all other than true septic cases there may be two causes at work simultaneously to set up this complication: first a disturbance of the nervous system (brought about by severe hæmatemesis, operation, or some such condition), which, owing to this nervous relation, manifests itself in the constricted vessels of the gland, leading to the more or less parched mouth, and allowing the entrance of organisms to the duct and gland from the mouth?

The bacteriology of the subject has not been worked at very much, and, so far as I can find, only the ordinary streptococci of suppuration have been found in such cases; so that this does not help us much. Further investigation into this and other points is necessary before we can determine the true cause of this interesting condition.

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SOME NOTES ON THE SLOW PULSE FOLLOWING DIPHTHERIA, WITH A CASE OF VERY SLOW PULSE.

BY W. F. LITCHFIELD, M.B., CH.M. (SYDNEY).

(READ BEFORE THE N.S.W. BRANCH, B.M.A.)

MASTER X., aged 8 years, was brought to me for medical treatment on November 1st, 1897. I found him to be suffering from a severe form of pharyngeal diphtheria. The history pointed to that being the fifth day of the disease. It is worthy of mention just here, that although, as I shall presently describe, the fauces were in a bad state, he did not complain of sore throat. He was a fairly well-nourished boy, with a dirty-grey complexion and an extreme want of general muscular tone. There was false membrane on both tonsils and on the uvula. There was also considerable swelling of the soft palate on the right side, and over this swelling there was a thin, ill-defined, glazed-looking false membrane; the glands at the angle of the jaw on the right side were also considerably swollen. The internal organs were all apparently healthy. The pulse rate was 115, and the knee-jerks were present.

Lehring's antitoxin (1500 units) was administered without delay. A throat swab of Liq. Sodæ Chlorinatæ was ordered, and brandy and strychnine given internally.

On the 4th, i.e., four days after the antitoxin was given and about the tenth day of the disease, I found that the pulse rate had dropped to fifty beats per minute. It was, however, regular, and of fair tension. In the meantime, the membrane had almost all come away, and the swelling in the neck had subsided. The boy was weak, but brighter than when first seen. He had also had several momentary convulsive seizures.

On the 5th, the pulse was fifty, but it was now somewhat irregular, and there was occasional vomiting.

On the 6th, the pulse had fallen to thirty-six. He was still vomiting, and there was great prostration; the throat was now quite clear; the urine was passed freely, but was not examined for albumen.

On the 7th, the pulse was thirty-seven and weaker. There was some palate paralysis.

On the 8th, the pulse was forty-two, irregular, and of low tension. The knee-jerks could not be elicited.

On the 9th, the pulse ranged from thirty-six to forty-four. In the evening the patient had a convulsion, and, sinking gradually afterwards, he died about 9 p.m. The nurse states that an

hour before death the pulse-beat registered only twenty to the minute. I did not see him at this stage myself.

REMARKS.—The interesting feature in this case is the extreme slowing of the pulse. I have not seen the pulse fall below forty after diphtheria before. I would like here to call attention, in lieu of what I shall say presently, to the progression of the post-diphtheritic symptoms in this case. There was first a general asthenia, followed shortly by the onset of a slow pulse, then came paralysis of the palate, and finally loss of knee-jerk.

On the Slow Pulse.

The slow pulse of diphtheria has hitherto received but little attention. The literature on the subject is very scanty, and no attempt has been made to give this important clinical sign its proper place in diphtheria. Some time ago, by kind permission of Dr. Clubbe, I published some remarks on the pulse in diphtheria. I had, as material to work with, the records of 150 cases of diphtheria that had come under my notice at the Glebe Hospital. I shall quote from that article so far as it suits the purpose just now.

"The pulse in an attack of diphtheria is quickened; the rapidity of the pulse varies with the intensity of the attack, reaching its greatest height in what we know as malignant diphtheria. When death occurs in this, the toxæmic stage, the pulse that fails is always a rapid one.

"In the large majority of cases, during convalescence after diphtheria, the pulse becomes slowed. This slowing sets in as a rule about the tenth day of the disease. It may appear a little earlier, and sometimes occurs later. The local manifestation of disease is usually over before the retardation of the pulse begins. The slowing is generally distinct, and irregularity and low tension are other features of the pulse. Occasionally, however, the pulse, though slow, is regular and of fair tension; again, the slowing may not be marked, but there is irregularity and low tension.

"In this series, six deaths were ascribed to post-diphtheritic heart failure. In every case a slow pulse ushered in the failure, and ample warning was given of the impending danger."

These things seem to me to establish beyond dispute one fact, namely, that this slow irregular pulse which sometimes progresses towards extinction is the result of a post-diphtheritic condition, i.e., it is due not to the direct action of the poison, but to some disturbance left by the poison. What, then, is the nature of this

disturbance? Is it in the brain, nerves, heart, or vascular system?

The position I wish to take up is that the post-diphtheritic pulse is a paralytic phenomenon, and that the lesion is a degeneration of the nerve terminations within the heart. I do so partly on positive, but perhaps chiefly on negative evidence.

The positive evidence exists in the close relationship that obtains between the occurrence of the slow pulse and the undoubted paralytic processes. The onset of paralytic symptoms corresponds very closely with the onset of the slow pulse, usually occurring a little later. Moreover, the expression of cardiac weakness follows much the same course as any other paralysis; it lasts about the same time, works off in about the same time, presents the same variation in intensity, and so on.

The negative evidence in favour of my contention depends on the absence of sufficient cause elsewhere to produce this peculiar form of pulse.

High arterial tension, due to peripheral resistance, is one cause of slow pulse. I think we may dismiss this cause in the present instance, seeing that, speaking generally, the post-diphtheritic pulse is a low tension pulse.

We may leave the brain out of consideration, since the central nervous system is not affected in diphtheria.

Degeneration of the vagus nerve has not been found sufficiently often to account for the pulse in question, nor would we expect it to cause slowing of the pulse even if present.

The question whether degeneration of the cardiac muscle is the cause of post-diphtheritic cardiac slowing and weakness is not so easily dismissed. Dr. Sidney Martin says, without special reference to the slow pulse, that cardiac failure in diphtheria is due to fatty degeneration of the heart muscle. He based his conclusions on some experiments on animals, and on a few autopsies on human beings. He gave his animals large doses of diphtheria toxin, and examined their hearts after death. The animals died at periods of one to three days, and he always found fatty degeneration of the cardiac muscle. Again, he found the heart fatty in two or three cases of cardiac failure in human beings, the subjects of diphtheria. Now, I take it that fatty degeneration of the heart is caused in two ways by diphtheria—1, by the direct action of a large dose of toxin; 2, by a degeneration of the muscle fibre secondary to nerve destruction. The first will occur early in the disease, and may be called diphtheritic or toxæmic fatty metamorphosis,

while the second will occur later, and may be called post-diphtheric or paralytic fatty metamorphosis. I have already shown that the diphtheric pulse is always rapid, and the post-diphtheric pulse nearly always slow. Hence, if we accept the theory that heart-failure in all instances is due to fatty degeneration, we are driven into the absurd position that fatty heart is the essential cause of a rapid and at the same time is the essential cause of a slow pulse. Moreover, fatty degeneration of the heart, as we know it in other diseases, is not specially associated with a slow pulse. For these reasons, while admitting that fatty degeneration of the muscle wall would complicate matters and increase the liability to heart failure, one cannot accept fatty degeneration of the cardiac muscle as the underlying factor in the production of the post-diphtheritic pulse.

With regard to the treatment of threatening heart-failure after diphtheria, I can only advise rest, brandy, and strychnine.

Dr. CLUBBE said that the subject was a very interesting one, and one that was hardly mentioned in textbooks. A slow pulse after diphtheria was a fairly common occurrence; but it did not often end fatally. In 300 cases there were 60 deaths, and of these six were due to post-diphtheritic heart failure. The exact cause of this slowing was not quite clear as yet, but he inclined to Dr. Litchfield's explanation.

Dr. SYDNEY JONES said that the absence of the complaint by the patient of sore throat was looked upon as a point in favour of the diagnosis of diphtheria. In 1856-7, Sir William Jenner was accustomed to teach that the slowing pulse in diphtheria was a grave symptom, and that cases of this character would be fatal. All cases he (Dr. Sydney Jones) had seen with a slowing pulse had proved fatal.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

THE Annual General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 25th March prox., at 8.15 p.m.

Business:—Report of Council and Treasurer's Statement; Presidential Address; Election of Council.

Members are reminded that the annual subscription for the current year (£2 2s.) is now due, and should be forwarded to the Hon. Treasurer, Dr. Crago, 84 College-street, Sydney.

GEO. E. RENNIE, Hon. Secretary.

WE desire to draw attention to the fact that the "Baron Von Mueller's Grave Monument Fund" has been in existence for some time past. It is intended to erect a magnificent monument, 23 feet in height, of grey granite, highly polished, and enclosed with an ornamental iron railing, on the Baron's grave in the St. Kilda Cemetery. Contributions will be received by the Rev. W. Potter, 28 Arnold-street, South Yarra, Melbourne.

HYDATID OF BRAIN—OPERATION—RECOVERY.

REPORTED BY W. B. VANCE, M.B., CH.B.,
D.P.H., RESIDENT SURGEON, THE ALFRED
HOSPITAL, MELBOURNE.

SUCCESSFUL operations for hydatid of the brain being so extremely rare, the notes on the following case, operated on by Mr. O'Hara, Senior Surgeon to the Alfred Hospital, Melbourne, will, I am sure, be read with interest.

T. M., aged 36, married, a cutler, was admitted to the hospital on July 10th, 1897, suffering from loss of power in right leg, arm, and face. Has aphasia, but can repeat two words, "Oh, Eliza," being the commencement of a popular coxer song. He has also *agraphia*.

He can, however, understand what is said to him, and can pick out his own name from amongst a list of others.

His tongue protrudes to the left side.

The loss of power is much more marked in the arm than the leg.

His illness commenced some six months ago with twitchings of the tongue and arm. This was soon followed by loss of speech and paralysis of first the arm and afterwards the leg.

For the last two months, however, there has been no increase in the loss of power.

For the first four months of his illness he suffered from epileptic fits, but has not had any lately.

He has full control over his bladder and rectum.

Reflexes normal; no loss of sensation. Pulse 72, temperature normal. No pain in head. Eats and sleeps well. Has not lost flesh lately.

Heart's sounds clear, no displacement of apex.

No albumen in urine; quantity normal.

No specific history; no history of injury; family history good; has no optic neuritis.

In consultation it was decided that he should be watched for the present, and if no improvement an exploratory operation should be performed. Accordingly the patient was discharged on July 21st, and reported himself from time to time. As no improvement showed itself under medical treatment, he was readmitted on January 6th, 1898. His condition now was exactly similar to what it was previously, with the exception that he had well-marked double optic neuritis, the left side being particularly affected.

With a two-inch Victor Horsley trephine Mr. O'Hara on January 21st removed a piece

of bone over the left motor area. On removing the disc no pulsation of the brain could be seen. An exploratory needle was introduced into the brain, and a quantity of clear fluid was withdrawn. Mr. O'Hara accordingly incised through the dura mater into the brain, and in the motor area struck a cavity about the size of a bantam's egg. The cavity was lined with a semi-transparent membrane.

After thoroughly cleaning out the cavity and inserting a drainage tube, Mr. O'Hara brought the dura mater together with sulphochromic gut. The scalp wound sewn and dressed antiseptically. Next evening patient had an epileptic fit. Tube was withdrawn, and fit ceased shortly after.

For the first few days patient had a slight rise of temperature, which gradually settled down. Wound healed by first intention.

Patient was discharged on February 2nd, the power of grasp in right hand being somewhat improved.

The fluid was very kindly examined by Dr. Mollison, who, although finding no hooklets in it, considered it to be hydatid fluid. The fluid contained excess of sodium chloride.

REMARKS BY MR. O'HARA.

Eight years ago I had the pleasure of exhibiting at the Melbourne Branch of the B.M.A. a boy, from whose brain I had removed a large hydatid cyst. He had made a perfect recovery from a condition of complete left hemiplegia and double optic neuritis, and was able to attend to his scholastic duties. In this case the symptoms began to disappear within forty-eight hours of the operation, but from the notes just published by Dr. Vance it will be seen that only the arm up to the present has shown signs of improvement. However, even this is encouraging, and leads one to hope that the other injured centres may recover in time.

In performing the operation I used a trephine sufficiently large to expose the leg and arm centre and a portion of the third left frontal convolution. All three formed part of the adventitious capsule, and were slightly harder and less yielding than normal brain substance. That he could repeat two words makes one sceptical as to the exact localisation of the speech centre, and strengthens the opinion expressed by Dr. William Elder,* "that there are other centres or mechanisms than those usually recognised."

* "Aphasia and the Cerebral Speech Mechanism." By Wm. Elder, M.D., F.R.C.P. Ed.

NOTE ON THE WORK DONE AND THE METHODS EMPLOYED IN THE LABORATORY OF THE ADELAIDE CHILDREN'S HOSPITAL.

BY THOMAS BORTHWICK, M.D., HON. BACTERIOLOGIST, ADELAIDE CHILDREN'S HOSPITAL.

MR. PRESIDENT AND GENTLEMEN,—

I would like in the first place to point out that we are indebted to the Board of Management, not only for the privilege of meeting here, with its opportunity of viewing the living exhibits, but also for the privileges afforded by this laboratory. In view of the close connection between bacteriology and medicine (and they have a relationship which is eminently practical, whether we regard it from an etiological, pathological, therapeutic, or hygienic point of view), it is impossible to fail to recognise the advantages to be derived by us from a laboratory such as this. I take it that the meeting of the Branch here to-night is a recognition of the public spirit and liberal policy shown by the Board in providing facilities for bacteriological work; and to Dr. Campbell, in particular, do we owe thanks, for his efforts to provide these.

The history of this department of the Children's Hospital is not sensational, but shows a steady growth in the work done and in the accommodation for the work. When it was decided three years ago to establish a bacteriological department, the only room available (with its minimum of apparatus) was so small as to make it practically necessary to confine the work to hospital purposes. Further, at the start, I had to do the work single-handed, and, however anxious I might be to do work for the profession generally, I was handicapped by want of time. But even from the beginning an attempt was made to do outside work, and, when it was found that the demand on the part of the profession for such work was growing, the Board of Management decided to take the opportunity of this new wing being built to provide a laboratory of such accommodation as to render its services available for all the wants of the profession and the public. Now we have a room, second perhaps to none, for most practical purposes, and fitted up with all the necessary apparatus and appliances. Moreover, several house-surgeons have been taught the work, and, with their help and that of my able assistant, Dr. Morgan, there should be no difficulty in meeting any demand made upon the laboratory. Such being the case, I shall give you a short

account of the work we have been doing and are prepared to do. It will be a very general statement, because I have already read papers on some of the subjects, and I hope that during the session other papers on the result of our work will be forthcoming.

I. Diphtheria.—This was the first branch of work undertaken in this laboratory, as in many others; and the stimulus was derived from the fact that the antitoxin treatment of the disease was on its trial, so that it was necessary to make sure that such cases as were treated by this means were really cases of diphtheria. It had been established beyond a doubt that this disease was caused by the Klebs-Löffler bacillus, and that this micro-organism was always to be found in the local lesion; hence, when the specific bacillus could be demonstrated to be present in any sore throat, the disease might be safely assumed to be diphtheria. When, on the other hand, the bacillus was not present, as shown by repeated examination if necessary, the sore throat was not of a diphtheritic nature. Woodhead, after examination of 7,823 positive cases of diphtheria, extending over a period of two years, gives the percentage of error as 5.1. Those cases in which the bacillus could not be demonstrated were shown to be diphtheria by the well-marked clinical symptoms and the high mortality; and he ascribes the failure to isolate the bacilli to their relative fewness, to the inaccessible position of the membrane, and to the difficulty in obtaining swabs in certain cases. Thus, although the bacteriological diagnosis may not be infallible, the percentage of error is so small as to hardly interfere with the results. For the demonstration of the presence of the bacilli, cultural and microscopic methods are employed. We provide for general use an "outfit," consisting of a sterilised swab of cotton-wool and a tube of sterile blood serum (Löffler's), with printed directions as to their employment. The swab should be applied freely to the affected surface, and then rubbed gently over the surface of the nutrient medium. If the outfit is returned at once to the laboratory, a coverglass specimen is made from the swab, and, after staining, is examined under the microscope, and thus a diagnosis may be made in a few minutes. Unfortunately, this can rarely be done in this climate, on account of the rapid drying of the swab, and so we may have to wait until the cultivation has incubated at blood-heat for twelve to twenty-four hours. Then specimens are prepared from the growth on the surface of the culture medium, stained by Gram's method, and

examined under the microscope. If the bacilli are abundant, the diagnosis can be made in even less than twelve hours. If the bacilli are relatively few to the number of cocci and other micro-organisms present, they may be so overgrown by these latter as to render it impossible to detect them for twenty-four hours, or even longer. Occasionally, we have failed to find them after twenty-four hours' incubation, and succeeded after forty-eight hours; and I am inclined to think that such a result is contributed to by the faulty manipulation of the outfit. Either the swab has not been applied sufficiently to the throat, or the infected swab has not been applied sufficiently to the culture medium. The rule is to rub every part of the throat showing exudation, utilising every portion of the swab for the purpose, and then rub the swab gently but firmly over the surface of the culture medium, turning it round and round while doing so. The only other points to be attended to are to avoid applying the swab immediately after the use of a disinfectant gargle or after vomiting, as the former inhibits the growth of the bacilli, and the latter leads to their being overgrown by other micro-organisms.

I have already referred to the bacteriological diagnosis as essential to a proper estimation of the results of the antitoxin treatment of diphtheria. But there are other advantages accruing to its use. There is the advantage of determining whether a sore throat is really diphtheria, when the clinical symptoms are such as to leave the matter in doubt; for a positive diagnosis would lead to isolation of the patient and the proper treatment of the disease. Again, there is the advantage of determining when a convalescent case of diphtheria is really free from infective properties; because, as long as bacilli are present in the throat, it is certainly unsafe to allow the patient to mix with other children or to return to school. In this hospital, it is part of our routine work to examine every sore throat occurring among the patients and nurses, and to make sure that the throat of every convalescent case of diphtheria is free from bacilli before it is discharged. In view, then, of the advantages and the importance of a bacteriological examination, it appears to me to be hardly an open question whether one is justified in omitting to employ it.

II. Tuberculosis.—The next branch of work to be taken up was the examination of sputum and other matter for tubercle bacilli. Since Koch proved that the tubercle bacillus was the true cause of phthisis and of tubercular disease generally, a demonstration of its presence has

rendered the diagnosis of tubercle easy and certain in many cases in which it was formerly difficult and uncertain. Thus, when we find tubercle bacilli present in sputum, it places the diagnosis of phthisis beyond a doubt; on the other hand, its absence after repeated examination of various samples of sputum enables us to say that the patient is not suffering from this disease. It has been shown that the bacilli can be found in the sputum in the very earliest stages—when physical signs are absent, and the only symptom a slight cough. The number of bacilli found will depend on the extent of breaking down of the tubercles, and, inversely, on the amount of sputum. In the incipient stage, they may be found in the sputum first coughed up in the morning, and may be absent in the later sputum. It has been stated that the acuteness of the disease may be ascertained by the character of the bacilli, being, when stained by Carbol-Fuchsin, of a bright red colour and distinctly moniliform in cases where the process is rapid, and of a reddish-purple colour without the distinct moniliform character in chronic cases. The characteristic staining reaction of the tubercle bacillus renders it easy of detection. It is difficult to stain, and special methods have to be adopted to ensure success; but when it has once taken up the stain it is equally difficult to get it discharged. This facilitates decolourisation of all other micro organisms and their subsequent counterstaining.

The method we adopt is a modification of that suggested by Kanthack and Drysdale. The sputum is shaken up in a five per cent. carbolic solution until it is thoroughly disintegrated. It is then centrifugalised, and, as the bacilli are particulate matter, they are carried to the bottom of the tube along with the other solid material. This ensures the concentration of the bacilli within a small area, and by this means their detection is rendered easy. After pouring off the supernatant fluid, a portion of the sediment is spread on a coverglass, and stained by the aid of heat in Carbol-Fuchsin. It is then dipped into twenty-five per cent. H.Cl., and washed in seventy per cent. spirit until all the red colour is apparently discharged from the specimen. By this process, the other bacteria which may be present are decolourised, the tubercle bacilli alone retaining the red stain. Then the specimen is washed in water and placed for a few minutes in Löffler's Methylene Blue; and, after mounting, it is seen under the microscope to show the tubercle bacilli stained red, and everything else blue. The whole process takes

a little over half-an-hour, and, if the bacilli are present in the sputum, they are rarely missed by this method. From what has been already said, it is evident that, especially in early cases, the best sputum to obtain is that coughed up after waking in the morning. It is also advisable to select the more solid portions of the expectoration for examination. The presence of hæmoptysis increases the difficulty of finding the tubercle bacilli, as the blood acts as a diluent, so that the expectoration should be allowed to regain its ordinary colour before submitting it for examination. A small, clean, wide-mouthed bottle, or jar, is all that is required to collect and transmit the sputum.

In addition to sputum, we have examined *expectoration from the larynx* in a case of suspected tubercular disease with a positive result.

Urine has also come in for examination in relation to tubercular disease, and by adopting the same method as in the case of sputum we have been able to find the tubercle bacilli. On account of the larger dilution in urine, it would be necessary to repeat the examination several times before accepting a negative result as final. The urine should be collected in a clean bottle, to the amount of several ounces, and should include all deposit.

In dealing with specimens for examination for tubercle bacilli, it is hardly necessary to take them aseptically or to place them in sterile vessels; but, if examination for other micro-organisms is wished for, in addition to the tubercle bacilli, these points must be attended to.

The advantage of early diagnosis of tubercular mischief needs no comment; but its value will have a special significance in the event of tuberculin or serum treatment being established on a firm basis.

III. Typhoid Fever.—The application of bacteriological methods to the diagnosis of typhoid fever has come within the scope of our work during the last twelve months. In this instance, there is no attempt made to find the specific bacillus; stock cultures are kept for the purposes of the test. I have already dealt with the rationale of the method in a former paper, so that I need not go again into detail. It will be sufficient to point out that the specific micro-organism of typhoid fever, known as the Eberth-Gaffky bacillus, is motile; and Widal discovered that when the blood of a typhoid patient is mixed with a fluid culture of the bacilli, the latter lose their motility and run into clumps. It has further been shown that no other blood produces this result under certain conditions, namely, a certain dilution of the blood and a time limit for the reaction.

Such being the case, it is evident that Widal's test is a valuable means of diagnosing early and doubtful cases of typhoid fever. The reaction has been obtained as early as the third day of the disease, but more generally after the seventh, although in some cases it may be delayed until late in the disease. It follows that its value lies not so much in early as in differential diagnosis, that a negative result is of little value in the early stages of the disease, and that the test should be repeated at intervals during the progress of a doubtful case. In regard to the reliability of the test in true cases of typhoid fever, the American Medical Association quotes 4,000 cases, with a success of ninety-five per cent. Widal himself examined the blood of 177 typhoid patients, with only one failure to get the reaction. As far as I am aware, we have had only one failure in an undoubted case of typhoid fever; but, unfortunately, we are not supplied with the stage of the disease or the subsequent history in the majority of examinations made by us—an oversight which I trust will be remedied in the future.

The method we adopt in carrying out the test is a modification of Delepine's. The blood is diluted one in twelve, a time-limit of half-an-hour is allowed for the reaction, and a broth culture of under twenty-four hours' growth is used. The hanging drop is employed on account of the drying properties of our climate. We find it necessary at intervals to renew or revivify our stock of bacilli on account of a tendency to the formation of false clumping; but so far we have found little difficulty in avoiding error from this source by mounting a specimen of the broth culture itself for comparative observation. The result can always be stated within an hour of receiving the blood, provided we have a recent culture; but, as the daily provision of a recent culture, which may not be required, means a large expenditure of culture medium, it may be necessary to wait for twenty-four hours in order to prepare a young culture. The delay of a day is not of much consequence in this branch of the work, and it has the advantage of allowing the serum of the blood to separate out, so that there are fewer corpuscles in the field to obscure a view of the reaction. Our greatest difficulty has been that the quantity of blood forwarded is too small, or that the tubes in which it is sent are too fine. It is difficult to get the blood out of the latter, and, when the quantity of blood is too small, it is apt to dry up during manipulation. We prefer fluid to dried blood, on account of being able to effect dilution more accurately; and we are

prepared to forward large-sized sterilised vaccine tubes for the purpose of collecting the blood. There should be no difficulty in filling them, if the hand is allowed to hang down for a time, a finger bandaged tightly from the proximal towards the distal end, and a needle plunged boldly into the palmar aspect of the extremity. Let me repeat the request for information as to the stage of the disease when a specimen is forwarded, and also as to the subsequent clinical history of the case.

IV. Pus.—The fact that pus formation may be associated with various micro-organisms renders its bacteriological examination of practical value. We have found the usual micro-organisms, as streptococcus, staphylococcus, the bacillus pyocyaneus, etc. There is one case which I wish to mention as an evidence of the value of this kind of examination. A specimen of pus from a discharging ear was found to contain an almost pure culture of the diphtheria bacillus; a piece of membrane was extruded from the ear soon afterwards, and the discharge ceased. The patient had had a sore throat previously, but as the case will be reported in full I merely mention it for illustration. In collecting pus, care should be taken to avoid contamination, and a sterilised vessel should be used for transmitting it. It is advisable to take it direct into the transmitting tube, if possible. The pus of suspected gonorrhœa should be collected with similar precautions; or, if this is impossible, then smear a thin layer of this pus over a No. 1 coverglass by means of a sterilised needle, and fix it by passing it with the film surface upwards through the flame of a spirit lamp. The specimen is then ready for staining at any time. In medico-legal cases, however, it would be necessary to have some of the pus for cultural examination.

The pus of empyema has been frequently examined by us, with the result that Fraenkel's diplococcus is found in pure culture in all cases that have not been previously interfered with. In all cases of pus sent in for examination, we use both staining and cultural methods.

These are the special branches of the work done in this laboratory, but in addition we have occasionally examined blood, cerebro-spinal fluid, and other material bacteriologically, as also water and milk for public health purposes. So far, very little original investigation has been done; but I hope, when some of the younger members of the Branch who have time at their disposal have mastered the elementary part of the science, they will develop sufficient enthusiasm to do some original work.

DELIVERY AT TERM, EIGHT MONTHS (239 DAYS) AFTER REMOVAL OF BOTH TUBES AND OVARIES, WITH VENTRAL-FIXATION OF THE UTERUS.

BY E. FAIRFAX ROSS, M.D., M.R.C.S. ENG.,
SYDNEY.

L.R., AGED 23, married three years, never been pregnant, was admitted into Lewisham Hospital in February, 1897. She had suffered for years from pelvic pains and dysmenorrhœa. She was then thin, with a pale, greasy skin, and a look of constant pain and weakness. Examination revealed a prolapsed movable uterus, with a retroflexed fundus, and an enlarged but otherwise normal os just within the vulva. The left ovary was enlarged, extending above the pelvic brim. The right ovary was prolapsed into Douglas's pouch, and very tender. The tubes were not dilated nor fixed. She had never missed a period, but had menorrhagia and severe dyspareunia.

On May 4th, the operation was undertaken, chiefly for the removal of the left ovarian cystoma, but ventral-fixation of the uterus was also intended and performed, and, in addition, the right ovary, being found riddled with small cysts, was removed with its tube. The uterus was fixed to the abdominal wound with three buried catgut stitches, and the wound closed in the usual way, which healed perfectly.

Convalescence was uneventful, and in a month she was up and about, looking and feeling well, free from ache or pain. She left the hospital and I saw no more of her till November 18th, 1897, when she presented herself to me in a great fright, having been told she had a huge abdominal tumour on the point of bursting. To my surprise, I found her pregnant, with a very active child, judging by its movements, and her breasts secreting milk freely. She was vastly surprised, believing it impossible, but was finally convinced, and told to prepare for her accouchement.

Her story is that a month after leaving hospital, and whilst enjoying excellent health, she noticed she was getting very fat. This she was told might be due to the loss of her ovaries; however, she went on getting fatter and fatter, and, always telling medical men she was minus her ovaries, she was treated for everything but pregnancy. Finally, on being told by a doctor she had a tumour, she went to hospital, when the exact condition was explained to her. She was confined by Dr. Barkas, of Paddington, on the 29th of last December; labour was

normal save that the occiput did not rotate, and she had to be delivered with forceps. The child, which I have seen, is very large and healthy in every respect. It is very evident that my patient was pregnant when I operated on her on 4th May, '97—probably in the second month—but of this there were no symptoms, and the ovarian cystoma had need of immediate removal.

It is of interest that passing the stitches deeply into the uterine tissue—but purposely not into the uterine cavity—did not cause abortion, nor did they interfere with the gradual enlargement of the uterus, nor with delivery. In my notes, kept by the Sister nursing the patient after the operation, no mention is made of any signs of the bleeding so frequently observed after the operation for the removal of the appendages. This fact is singular, as I have never previously failed to observe such hæmorrhage.

SCIATICA.

By J. MURRAY GIBBES, M.D., BORDER TOWN, S.A.

FOR some years past I have adopted a treatment for sciatica which has proved most successful both in most acute as well as chronic cases. It consists of a liniment and mixture. The former has to be well rubbed into the painful part for five minutes with the edges of a rolled-up bandage, great care being taken that none of it gets on the fingers. If necessary, a second application should be used on the third or fourth day. As it has cured every case I have used it in for the past seven years, it may also prove equally successful with others:—

R 3ii. Crude Acid Carbolic, No. 5.
Aqua ad. 3ii.

To be well shaken before used.

R Pot. Iodi. 3i.
Sodii Salicyl. 3ii.
Sp. Chloro. 3ii.
Aquam 3viii.
3iv. Om. 4tis horis ex aqua.

The last case in which I used it the patient lay on his bed in great agony, and stated he had not slept for eight nights. When I went to see him the next morning his wife said he had gone out for a walk, and had slept all night, he having obtained relief in an hour.

We have received from Messrs. Alfred Bishop and Sons, of London and 18 O'Connell-street, Sydney, some specimens of their Varalettes, or compressed effervescent tablets of Citrate of Piperazine and Citrate of Lithia. This is a very elegant and agreeable way of administering these drugs.

NOTES ON CASE OF INVAGINATION OF COLON INTO RECTUM, DUE TO MALIGNANT ULCERATION.

By THOMAS E. SMYTH, M.D., &c., TAVISTOCK, ENGLAND (LATE CAMPBELLTOWN, N.S.W.).

ON the 1st March, 1897, Mr. W., aged 50, consulted me, stating he was suffering from "dysentery," which commenced about six weeks previously; and though he had been under treatment for most of that time no improvement had resulted.

He was at the time much worried by legal business, and expressed a wish to be made well as soon as possible. There was one point of importance in his family history. His father had always had a tender epigastrium, and, though patient did not know it, his relations told me that the cause of death of the father was at the time supposed to be due to malignant disease.

On examination of patient, the abnormal conditions found were—tenderness in the epigastrium (which patient stated had existed for many years, and became worse if he was not careful in his diet), tenderness and colicky pains along the course of the colon, and on an average about 10 to 15 motions of blood and mucus in the twenty-four hours, accompanied by much tenderness.

I ordered patient absolute rest in bed, milk diet, Bismuth and Opium. The following day he was called away to London in connection with his legal case, and I saw nothing of him till the 4th of April. His condition was much the same as on March 1st, and his case coming on in the Courts I did not see him again till the 2nd of June. He was then looking about five years older, was beginning to lose weight, the "dysentery" and general condition of colon appeared to be about the same. He had tried a fortnight at the seaside since I had last seen him, but with no benefit to his health; and, his case being still unfinished, I did not see him again until the middle of September.

He was then looking extremely ill, complexion sallow, continued loss of weight, and unable to sleep. I ordered absolute rest in bed, milk diet, astringents, and intestinal antiseptics; and the motions became less in number—about two or three daily. The general abdominal tenderness disappeared, but at about the centre of the transverse colon there was an area, about two inches square, which had a decided feeling of resistance on palpation, and still remained tender. Patient had now been in bed about three weeks, and stated he felt much better.

On October 9th, on visiting him, he informed me that he was quite well, the tenderness had all gone, and he would like to get up, as he had had no motion at all for past twenty-four hours. On examining the abdomen, the localised tender area could be distinctly made out at about the junction of transverse and ascending colon.

On the 10th October the tender area had descended a little; examination per rectum revealed nothing; no action of bowels for forty-eight hours.

On the 11th October tender area was in right iliac region, and on examination per rectum I could feel a portion of intestine invaginated into rectum, and about an hour later could feel the hard edges of the ulcerated surface about one inch inside anal orifice.

Mr. Swain and Mr. Lacy, of Plymouth, saw the case with me, and on the 13th October removed the affected part. The sphincter being dilated, the growth was well drawn down and outside, the bowel was encircled with sutures well above the growth, care being taken that no small intestine protruded, and the growth was cut away.

The intestine was then returned well into rectum, patient put to bed (the lower end of which was raised about one foot to favour return of intestine). The bowels acted freely twenty-six hours after operation. Patient made an excellent recovery, sutures coming away eighth day; patient got up on sofa ninth evening. He now feels very well, eats well, and is gaining weight.

MR. W. B. SAUNDERS, of Philadelphia, U.S.A., announces the publication of *An American Text-Book of Genito-Urinary Diseases*, edited by Drs. L. B. Bangs and W. A. Hardaway. Mr. Saunders has made arrangements for the publication of an English edition of the *Lehmann Medicinische Handatlanten*. The following atlases will shortly appear:—*Internal Medicine and Clinical Diagnosis*, by Chr. Jakob; *Legal Medicine*, by H. R. von Hofmann; *Operative Surgery*, by O. Zuckerkandl; *Laryngology*, by L. Grünwald; *External Diseases of the Eye*, by O. Haab; *Veneral Diseases*, by Karl Kopp; *Skin Diseases*, by Karl Kopp. The following volumes are in preparation for early publication:—*An American Text-Book of Diseases of the Eye, Ear, Nose, and Throat*, edited by G. E. de Schweinitz, M.D., and B. Alexander Randall, M.D.; *An American Text-Book of Pathology*, edited by John Guitérrez, M.D., and David Riesman, M.D.; *An American Text-Book of Legal Medicine and Toxicology*, edited by Frederick Peterson, M.D., and Walter S. Haines, M.D.; *A Manual of Pathology*, by Alfred Stengel, M.D.; *Nervous and Mental Diseases*, by Archibald Church, M.D., and Frederick Peterson, M.D.; *A Text-Book of Embryology*, by John C. Heisler, M.D.; *Diseases of the Nose and Throat*, by D. Braden Kyle, M.D.; *A Text-Book of Obstetrics*, by Barton Cooke Hirst, M.D.; *An American Text-Book of Nursing*, by American teachers, edited by Roberta M. West.

THE PHILOSOPHY OF DISEASE. IV.

BY J. MURRAY GIBBES, M.D., BORDER TOWN,
S.A.

FIRST PRINCIPLES.

"THE laws of vitality extend their influence far beyond the reach of the ordinary laws of matter, and many of the most important phenomena of the world remain unexplained from the want of a due cultivation of the knowledge of life," wrote a physician in the early part of the present century. The reasons for the many different opinions which prevail as to the correct treatment of disease, and the very unstable character of our science, consist in the fact that, amidst all the superstructure, we are in possession of no fixed principle, for, if we possessed it, it is possible that an equal advantage would result as from the development of a first principle in philosophical science. All successful treatment of disease must fall in with the system which explains the laws that regulate the actions of organic life. Disorders cannot arise without some cause, or some natural object, for an acquaintance with other phenomena of nature would lead us to discard such an idea.

It was by observing bodies in motion that the laws of gravity were established; and by connecting similar effects, and tracing the cause, natural philosophy attained a simplicity in accounting for and explaining the laws of nature. By connecting similar symptoms of disease, may we not hope and expect to find some efficient reason for the disturbances which take place in the body? The facts are daily before us, and the phenomena are equally under our observation. The operations which result from organization display the same certainty of contrivance and design, and corroborate the stupendous system of wisdom and intelligence which we find displayed in the structure of the animal bodies. In the external world, we everywhere see the wise and beneficent purposes to which all its laws are directed. We find the adapted means to ends everywhere to be traced, and these suited to the preservation and well-being of men and animals. Hence, we can presume that the human body is equally adapted to the proper reception and use of these external agents, and that the organs of the body, and their respective functions, become responsive to these general circumstances. With this wise provision, however, we should be ever endangering the well-being of our bodies, did not nature wisely counteract the effects of noxious agents by powers inherent in the animal machine; and these counteractions for the most

part constitute the whole list of diseases. Admitting this effect, and this object, it is clear that any means which merely tends to prevent or allay such salutary disturbance must ultimately leave the constitution under the influence of those mischiefs which the natural powers were disposed to remove, and the rejection of the noxious agent would not take place.

Although we cannot always discover the causes against which the disturbances are destined to react, still it is but fair to conclude that when they take place some determinate end is attempted by the natural powers, and that we should endeavour to discover wherein nature may be the most essentially assisted in these her salutary operations.

The question is often asked,—Why is it that man, who is said to be descended from animals, and to be superior to them, should be so much more subject to bodily disorders than they are? The reason is, that the intelligence of man is a developing power, and one not possessed by animals. This intellectual power, not being so powerful as the animal mind or power he possesses in common with the animal world, is dominated by it. As this power develops, the animal power weakens; consequently, though man is superior to animals in intelligence, yet he is weaker than they are in animal instincts; therefore more liable to err and break laws. The intellectual power governs the older and animal power, just as the animal power governs the ganglionic or sympathetic or automatic power. But in the latter case the animal power, as evinced by the instincts of the animal, is nearly perfect in every animal, whilst the intellectual power of man is only in its early stage of development. The breaking of laws—food laws—by man is a natural and unavoidable consequence. Man is like a fine ship placed in the charge of a young, inexperienced commander, whose inexperience causes him to err. Nature has provided for this by those powers she has endowed the body with, and which I have described in my previous papers.

The animal mind lessens as the intellectual develops.

1. Education is developing the intellectual minds of women rapidly at the present time, as is evidenced by them becoming doctors, lawyers, teachers.

2. St. Paul knew this would be a likely result, so said: "Let women keep silence in the church," having naturally a bachelor's horror of a women's tongue—I mean overpowering eloquence.

3. The intellectual development of woman's mind is evidenced in her lessened animal

powers, her lessening power of suckling children, her lessening families, her always requiring medical treatment soon after marriage, her craving for intellectual power, her craving for political power.

4. Women are rapidly losing their domestic virtues and becoming neutrals—of neither sex.

As man's intellectual mind develops law-breaking will become less.

1. Man will have increased reasoning powers, which will make him understand laws made for his benefit.

2. It will make him study first principles more than their effects.

3. The physician will be a scientific teacher of nature's laws, and not a mere drug-giver.

4. He will be less liable to be led away by plausible theories propounded by German *quid nuncs*.

5. He will discover more laws.

6. He will become less brutal. He will believe more in the Creator and less in the priest.

ON AMPHORIC RESPIRATION DURING THE COURSE OF CROUPOUS PNEUMONIA.

By E. HIRSCHFELD, M.D., HONORARY PHYSICIAN TO THE BRISBANE HOSPITAL, BRISBANE.

READ BEFORE THE QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE following case of Croupous Pneumonia is of some interest on account of the unusual auscultatory symptoms it exhibited.

Mrs. W., 35 years of age, has been ill for the last three months with pain in the right side and hypochondriac region, with a good deal of cough and thick yellow expectoration. Three weeks prior to her admittance she complained of pains in the left side, which were relieved by the application of a blister. On 30th June cold shivers and very severe pain in the right side, especially while taking a deep breath, or coughing. Bowels regular.

She was admitted to the Brisbane Hospital on the 1st July, looking very ill, with very flushed face; T. 103.6°, P. 116, R. 40. Sharp pain in the right infra-axillary region, extending in front towards the sternum. Physical examination showed the left lung fairly normal, with the exception of intensified vesicular breathing at the back and some pleuritic friction over the base. A small area of bronchial breathing could be found over the base of the right lung without any râles, but a good deal of pleuritic friction, most noticeable during deep inspiration. The tem-

perature ranged for the next few days between 102° and 104.4°, pulse 108 and 120, resp. 36 and 44. On the fifth day a pseudo-critical fall to 97.6°, but soon rising again up to 103.6°, and two days afterwards the temperature declined lytically, but did not quite reach normal. A renewed rise at the end of the second week lasted for some considerable time, but finally the temperature became normal in the evening, after having shown a somewhat remittent type; but still there was a tendency to a rise in the evening. The patient was finally discharged on her own urgent solicitations, convalescent, yet very far from being well. There was still cough and fairly abundant expectoration, the pulse averaged 96, the number of respirations 24, and diminished breath-sounds and bronchial respiration over the right base.

So far this case does not show much difference from a croupous pneumonia delayed in its resolution, but the point of interest was this: After the patient had been in the hospital two weeks it was found on examination that a patch of about three or four inches in diameter clearly exhibited *loud amphoric breathing*. This patch was situated between anterior axillary and mammillary line, just above the lower border of the right lung. There was no doubt about the character of the respiratory murmur. It was as typical as it can be heard over a big phthisical cavity, and accompanied by diminished bronchophonia. It was limited in its area as mentioned, and lasted between two or three weeks, sometimes becoming more or less loud, and changing in extent also.

Geigel* says with reference to this subject:—"In extremely rare cases one of these cavernous symptoms is observed also during croupous pneumonia. The physical explanation of amphoric resonance in pneumonia has hitherto been invariably unsatisfactory (spotlet bishen jeden Versuchs). One might be inclined to assume that a large bronchus be auscultated direct, but even then the amphoric resonance would be very unusual indeed; but it cannot arise in the airless lung tissue. The relatively most simple explanation would be to think of a simultaneous vibration of the stomach or the bowels when filled with air and dislodged upwards. This at least would be a plausible explanation for a pneumonia of the lower lobe of the left lung."

You see we may dismiss the latter explanation at once. In our case the inflammation affected the lower lobe of the right lung. Our

first idea was that a large cavity had been formed or a previously existing one had been enlarged through the breaking-down of the hepatized pneumonic lung tissue. The patient's looks made one suspect phthisis; moreover, her husband had only died a few months previously from pulmonary consumption. The sputum was examined altogether on three different occasions by Dr. Halford, who was not able to discover tubercle bacilli at any time. It is needless to say that if the tubercular process had been such as to lead to the formation of a large enough cavity to produce amphoric resonance tubercle bacilli would have been found abundantly in the expectoration on every occasion. That the presumed cavity was not caused through gangrene or abscess of the lung could not be entertained from the other symptoms the patient exhibited, beside the fact that the amphoric resonance had disappeared at the end of three weeks.

After thus excluding everything else which could be made responsible for the amphoric resonance, it appeared to us that the most feasible explanation for the phenomenon would be the formation of a circumscribed pneumothorax, the extent of which had been limited by previous adhesions. Pneumothorax as a complication of or sequel to croupous pneumonia has not been mentioned anywhere as far as I could find when searching the literature, but there is no theoretical reason why it should not occur. You will remember that it was noted down when the patient was admitted, that beside the bronchial breathing there was a great deal of pleuritic crepitation, as is generally the case where the inflammatory process of the lung extends close to the pleura. There had been a bronchitis for the three months prior to her admittance, and the persistent coughing, about which she had complained, is bound to have predisposed her to pleuritic complications. Besides, we know that in nearly every *P.M.* examination of patients who have died in the course of croupous pneumonia the pleura is more or less altered from a mere dull appearance up to the condition of fibrinous membranes. So it is likely to suppose that in our case, the resolution being delayed, the suppuration which normally accompanies the stage of resolution led to a perforation of the pleura after adhesions had been formed previously, and communication with some bronchial branch being established occasioned the pneumothorax. It is noteworthy that in this case the temperature became normal and remained so for over a week without any operative interference, while the amphoric resonance

* Geigel und Voit, "Klinische Untersuchungsmethoden," 1896.

disappeared, as undoubtedly the pneumo-thorax, as if it was such, must be more correctly described pyopneumo-thorax. Before she left she had an evening rise of up to 100° and 101° F., which gradually improved.

I may mention here that diplococci were found microscopically in the expectoration.

The assumption that we had in this case to deal with a complicating pneumo-thorax was further strengthened by the somewhat tympanitic character of the otherwise dull percussion note, and the fact, that, though the temperature declined when first the amphoric breathing was found, the respirations increased in frequency.

Can the existence of a pneumo-thorax be thus made responsible for the thoroughly unexpected appearance of amphoric resonance in the course of croupous pneumonia, the explanation of which has, according to Geigel's text book, been hitherto invariably unsatisfactory?

We must remember that a pneumo-thorax, especially when it is limited to a small area by adhesions, can easily be overlooked, more particularly when occurring in a disease where it is not expected. Osler says with regard to it: "There may, however, be no urgent symptoms, particularly in cases of long-standing phthisis. On more than one occasion I have found, *post-mortem*, a pneumo-thorax which was unsuspected during life." West states that even in healthy adults this latent pneumo-thorax may occasionally occur. Let us hope that the above case, in which the symptoms have been perhaps a little plainer, may contribute somewhat towards the elucidation of this uncommon phenomenon—the amphoric respiration during croupous pneumonia.

THE C.D. ACT IN NEW ZEALAND.

BY ROBERT FULTON, M.B., C.M. EDIN.,
DUNEDIN.

READ BEFORE THE OTAGO SECTION OF THE NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION, NOVEMBER 24TH, 1897.

GENTLEMEN,—In bringing this paper before you as a means of opening the discussion on the subject of the C D Act this evening, I lay no claim whatever to have provided anything very original, but merely to have collected into a concise and useful form certain memoranda and material at my disposal; to have furnished certain statistics bearing on the subject; to have added a few comments upon them; and then to have shown in a crude manner by what means I think the Acts might be workable. I acknowledge with gratitude the valuable infor-

mation I have obtained from the pages of *The Lancet* and *British Medical Journal* of various dates, and also the kind assistance of Dr. Irving, of Christchurch, in providing me with certain memoranda in his possession.

In 1869 an Act was passed through the General Assembly of New Zealand which had for its purpose the lessening, if not the stamping out, of venereal diseases in the colony. Such outcries were made against it, in consequence of the compulsory examination clause, that at no time has the Act been universally put into force, and, although it is on the Statute Book, it is absolutely a dead letter. To such an extent do a certain class of people go, that continuous agitation has for the last 20 years been made in order to remove what is said by them to be "an insult to women and a legalising of vice." A great deal of this opposition arises from the terrible stories which from time to time have been told of the forcible arrest and digital examination of young and innocent girls and women. These, being met late at night by designing and evil-minded policemen, and being taken for prostitutes, have been arrested and hurried before a surgeon. This man (according to the imagination of many of these well-meaning, but misguided individuals) is himself as bad as the police, and is allowed to examine them, shocking their modesty and often classifying them as prostitutes, and to issue licences certifying them fit to carry on that calling. The Act which had been passed in England a short time before allowed a policeman at any time to arrest a woman whom he found about during late hours, and possibly in largely populated cities isolated instances did occur of virtuous women and girls who, keeping late hours on account of their particular occupation or calling, were wrongfully arrested and detained in error. No doubt such cases did occur, and innocent women occasionally suffered for the guilty; actually in some cases the police exceeded their duty by detaining in gaol women who, quite innocent, refused to sign the paper agreeing to come up for examination when they were called upon—in other words, refused to sign a declaration that they were legalised prostitutes. In consequence of the agitation which took place after the Act had been in force a few years, a regular wave of fanaticism swept over Great Britain and finally reached this country, condemning every kind of restriction on this hateful and inheritable type of disease as an attempt to interfere with the penalty of sin, and as an encouragement to immorality.

The New Zealand Act seems to have avoided

many of the mistakes of the English one, and makes it necessary for a superintendent of police to go before a J.P. and swear that a certain woman is, to his knowledge or belief, a common prostitute under the meaning of the Act, and within his particular district.

The J.P. may, if he think fit, issue a notice to her to appear before a doctor for examination at various periods for one year from date, for the purpose of ascertaining whether she is affected with a contagious disease, and the service of such notice on her shall be sufficient warrant for the surgeon to examine her.

The appointment of surgeon is carefully made, and must be duly gazetted, and the choice of reformatory, gaol, or hospital for detention also. Moral and religious training and instruction, management and government of every female reformatory, is of course provided for.

Any woman in any place to which the Act applies may voluntarily, by submission in writing, before a superintendent of police, subject herself to periodical examination. If any woman is suffering from a C.D., she shall be liable to be detained in the reformatory, and must proceed there at once with her certificate, copies of which are sent to the superintendent of police, who must, if she refuse, apprehend and take her there forthwith. She must remain there under treatment till discharged by the surgeon. She cannot be detained any longer than three months under any one certificate, unless specially certified so to do by the surgeon.

If any woman, detained, considers herself entitled to be discharged from the reformatory, and the visiting surgeon refuses to discharge her, such woman shall, on her request, be conveyed before a J.P., who, if he is satisfied upon reasonable evidence that she is free from C.D., shall discharge her, and such discharge shall be considered to have the same effect as the discharge of the visiting surgeon.

If any woman declines examination, leaves the reformatory, or neglects treatment when in the reformatory, she shall be liable to imprisonment in the reformatory or gaol, with or without hard labour, for a term of not exceeding one month for the first offence, or three months for the second. She shall still be liable to examination periodically after imprisonment, unless certified free from disease.

If any woman leaves a reformatory with notice from the visiting surgeon that she is still suffering from a C.D., is found afterwards in any place for the purpose of prostitution at any time before she is certified free from the

C.D., and before a certificate to that effect shall have been filed in the R.M. Court, she shall be guilty of an offence, and, being brought before two Justices, be liable to be imprisoned with hard labour for a period of not exceeding three months.

If any woman subject to periodical examination under the Act (either by voluntary submission or under an order from the J.P.) desires to be relieved therefrom, and not being under detention in any reformatory, may make application in writing to a J.P., who shall appoint a time and place for the hearing of such application, and shall notify herself and the superintendent of police thereon. If, on the hearing thereof, it is shown to the satisfaction of the Justice that the applicant has ceased to be a common prostitute, or if she enter in recognisances with or without sureties for three months thereafter, she may be freed from such examination. If she goes into public places for the purpose of prostitution, or conducts herself as a common prostitute, she shall forfeit her recognisance.

If any person knowingly allows a contaminated woman to resort to his or her house for the purposes of prostitution, he or she shall be liable to be fined £20, or, at the discretion of the Justice, to six months' hard labour.

With regard to the procedure of the Act, the Justice who sits to enquire into the truth of the statement against or by a woman shall not, unless the woman so desire, consider the room an open Court and, unless the woman otherwise desire, the Justice may in his discretion order that no person has access to or be or remain in that room without his consent or permission.

It is difficult for us as medical men to see and understand the reasons and arguments against strict enforcement of this Act, with the exception of the inconsistency of allowing the male sex to go scot free while the females are punished. An alteration of the Act, combining some of the provisions of the Infectious Diseases Notification Act would, perhaps, meet the case. Any person suffering from an infectious disease under the Act is required to be notified by the physician in attendance, and the householder, at very short notice, to the local Board of Health. Why, then, should such cases of this C. D. as constantly occur in our own practice be allowed to go freely about, a daily menace to the health of those with whom they come in contact? "We pity those who have become the victim of" the disease primarily, but we must feel more for those who have unwittingly become victims of the profligacy or misfortune of those from

whom they had no reason to anticipate danger. The public generally do not recognise that to a very large extent the evil effects of this disease fall upon the innocent wives and children of profligates, and that by strict enforcement of this Act first, and then by gradual alteration so as to include both sexes, will it become a sure and certain means of "stamping out the disease."

The Court of St. Marylebone, in Christchurch, are doing good work in trying to educate their public to see into this, and have asked the aid of the local branch of the British Medical Association, and, in a letter to their Hon. Secretary, says:—"The contention that the C.D. Act when in operation fails to diminish the severity or amount of venereal disease in India has been absolutely refuted by the recent departmental report of the India Office Committee, set up to enquire into this matter. Certain measures are recommended, and we are strongly in favour of similar measures here, and think that they would undoubtedly tend to diminish the frequency and severity of the disease. Many of the unfortunate sufferers would be only too glad to go into Lock Hospitals, or special wards, and to remain there until discharged as cured. We feel that it is impossible to deny that the unfortunate victims of venereal disease have a claim upon public hospitals for treatment equal to the claims of anyone else suffering from a contagious or infectious disease, and is it not cruel to withhold it?"

"We should be glad to have the opinion of your Branch of the British Medical Association whether the inclusion of venereal diseases in the list of infectious diseases is desirable, and if there are any other means which our Society could initiate or carry out, tending to diminish a scourge which is sapping the strength of thousands, and bringing misery suffering, and disease upon innocent women and offenceless children."

An article in the *British Medical Journal*, of February 16th, 1895, shows clearly the ages of those who died of syphilis in 1893 in England. According to the report of the Registrar-General, 1,190 males and 964 females died in England of syphilis. Of the males, 928 (or 77.9 per cent.), and of the females, 745 (or 77.2 per cent.) were under five years of age. Various as may be the views held regarding the propriety of Legislative interference with the propagation of this disease, and as to the efficacy of such means as have hitherto been proposed for that purpose, it is clear that no consideration of the subject can be complete which does not recognise the large comparative incidence of the mortality on the early years of

life—the great preponderance with which the punishment falls on infants. In a leaflet sent out on this subject by Dr. Irving, of Christchurch, last year, he says in conclusion:—

"In view of these facts, and that the disease is largely increasing in New Zealand, it is high time that something was done to remedy such a state of things. It is inexplicable that the rulers of the State, recognising their duty to conserve the health of the people, individually and collectively, have passed stringent laws for the prevention and instant notification of small-pox, scarlet, typhoid, &c., but leave a greater scourge than all these put together to pollute all grades of society. In many respects, New Zealand is in the van of progress, but Cape Colony has snatched the lead from us by enforcing the C.D. Act against, or rather in favor of both sexes. Whether the Act as in force there has been amended so as to deprive it of the clauses objected to by women I do not know, but it would not be difficult of accomplishment. Many and bitter will be the curses hurled against us if such a scourge is allowed to continue to destroy the health and sap the constitutions of the coming generations.

In May last the whole question was brought up in the House of Lords as the result of Lord George Hamilton's dispatch to the Government of India on the Health of the British Army, and the debate on the subject lasted for two days. The late Commander-in-chief, Lord Roberts, of Kandahar, and others, proved from statistics the inefficiency caused by venereal disease in the army. The late field expeditions show how men, apparently sound on starting, break down under the hardships of service, their constitutions having been affected with this disease. It was shown how much had been done to improve the mental and moral and physical side of a soldier's life, and yet this had entirely failed to check the spread of the disease. The principles underlying Lord George Hamilton's dispatch were approved by the House of Lords, and included every possible means, religious and moral, to discountenance vice—the exercise of the influence of commanding officers, chaplains, and medical officers in this direction; the removal of temptation and opportunity; the suppression of intemperance; the provision of means of employment, recreation, and refinement; the avoidance of any semblance of pandering to passion or making vicious indulgence safe; the recognition of these diseases as transmissible complaints, whose suppression may and must be compassed by controlling the conditions of transmission, and to this end the early detection of their existence, and the segre-

gation and treatment or expulsion of their subjects as dangerous members of the community, as long as they continue to be so; in other words, to enforce the C.D. Act in a modified form. Lord Onslow mentioned the fact that a memorial had been presented to the Secretary of State, signed by a very large number of representative women, and expressing the belief that in addition to their sanitary value they would afford the "fallen" an opportunity to escape a life of habitual vice. The reforming influence of the hospital must never be forgotten. When a poor woman has fallen to the very lowest grade of her wretched calling, when vice and suffering and degradation have almost abolished her right to be called human, and when any change in her life would be a change for the better, then are influences of Christian and humane women most likely to benefit and induce the sufferer to exchange a life of shame and misery for one of decency, industry, and comfort."—*B.M.J.*

As is well known, the subject has been repeatedly brought before the N.Z. House of Representatives, in the form of bills for the repeal of the Act, and it is chiefly with regard to the arguments used for and against such repeal that I have ventured to take up your time to-night. I append a memorandum showing the number of times such attempts have been made—attempts which, I am glad to say, have so far failed; but I fear that if we are not on the alert to bring this matter before the public in some active manner, continuous agitation in this direction will be carried on by members of the Government party, and eventually success will crown the efforts of people, a very large majority of whom know nothing of the matter in hand. I shall first ask your indulgence whilst I give in short form the main lines of argument, and the chief points in particular speeches in favour of repeal, and then giving the reasons advanced by hon. members on the other side, go on to a few statistical memoranda which conclusively refute the continued assertion as to the uselessness of these Acts as enforced in British and foreign countries. In the debate on this subject in 1887, Dr. Newman made a most remarkable speech. To me, as a medical man, it seems incredible that he could have held such views, and I have taken the liberty of reading this speech *in toto*.

Dr. Newman: I do not suppose that there is any Act which has been before the English Parliament and has caused more discussion all round on both sides than this sort of Act. Of course there can be many things said in favour of it. It casts difficulties in the way of women earn-

ing a living in this discreditable fashion, and it does to a large extent decrease, in every town where it is applied, juvenile prostitution. The number of young girls who go astray where the Act is in force is not anything like as great as where the Act does not exist. In these two ways, therefore, there is no question the Act is useful. There can be no question also that in large English towns, where naval and military men are, it has a very good effect in keeping down disease which is very rampant in big cities. So far, then, it is useful; but the Act is so delicate to handle, and gives such enormous powers to the police, that it is a grave question even in the minds of those who admit its benefits whether it should be acted on; and though at one time a very great proportion of the members of the medical profession were in favour of it, there is now a strong feeling on the part of a good many of them that it should be done away with. There can be no question that the Act is degrading in many ways, and it puts almost every woman who happens to walk in the streets at night in danger of being apprehended as a prostitute. You have only to read what is going on in France and what is happening in England to see that this has caused such a revulsion of feeling that in England a large House of Commons swept the thing away almost without discussion. Many honorable members admitted the good it did, but they said the evils of it were enormous. Of course its evils in a country like this, where it is only partially applied, are very considerable, because women who become infected, at once leave the cities of Auckland and Christchurch, where the Act is enforced, and go to Dunedin and Wellington. It only removes the disease from one part to another and clusters it in particular places. As regards the evil of this disease I think hon. members take an exaggerated view of it. Members all round seem to think that syphilis is one of those diseases that go on for ever. Outside this House, if we took the first hundred men we meet walking about, we should find that a considerable percentage of them have had that disease, but they have never transmitted it and never will; and all those wonderful pictures of how children suffer are only true in particular cases. If people are well-to-do, do not drink, and go to the doctor, they get cured with reasonable skilful treatment. If you want to see the disease in full force, and the horrible pictures of it which the hon. member for Geraldine refers to, you will have to go to the coloured races—to the Lascars and others;

and I have seen it in large hospitals like Guy's Hospital fearfully bad. But in a country like this, where nearly everybody is well-to-do, it is easy to reduce it to utterly insignificant proportions, and to bring in an Act for the suppression of this particular disease is altogether unnecessary. As a matter of fact, in New Zealand, the amount of disease of this kind is exceedingly small. I took some trouble some time ago to question numbers of medical men in this part of the colony on this subject, and they were pretty well all agreed with me about the disease. Of course you can turn to documents by medical men who have a craze on the subject and attribute nearly every disease to it; but I say, if you take a hundred men or women that have the disease, and treat them with ordinary skill. In two or three years there would hardly be one that would show the trace of it. Among ourselves the disease is wearing out. Sober, careful white men catch it in its mildest form, but the black races suffer from it very severely. As to children suffering from it in this country I have hardly ever seen any cases here where children have been affected with syphilis, and I maintain that it is a disease of such insignificant magnitude that it is altogether unnecessary for us to have an Act specially dealing with it, with all the attendant horrors connected with such an Act."

Here follow extensive quotations from the New Zealand "Hansard," which are omitted from this reprint. The arguments all tend to show—

1. That the Acts are useless and do not lessen prostitution or disease.
2. That they are unnecessary, as the police have power to act without them.
3. That they are a disgrace to the statute book of the Colony and an insult to women.
4. That the Acts are repealed everywhere else (?), and they therefore should be repealed here.
5. That the Acts come between crime and its consequences.
6. That they drive the disease from protected to unprotected towns.
7. That they made vice attractive; gave it the Government sanction, and tended to build up vested interests in prostitution.
8. That the Acts had been proved useless in France, and had been repealed in India because disease had become worse under their influence.

Much use was made of some articles by Dr. Chapman in the *Westminster Review* of a date of more than 20 years ago, and statements that women could not be adjudged free from disease by any mere examination were made much of. It was also stated that Dr. Mireur, Medical

Inspector of Paris, had said that the disease was specially caught, and that no examination could be said to prove women safe. Among 367 cases 234 had come from registered women.

Mr Puckle also found that of 510 cases 374 were from prostitutes submitted to compulsory inspection. A pamphlet was quoted from showing that in 1875 65 per cent. of the prostitutes examined had the disease upon them, and that this gradually increased from year to year to 73, 75, 83, 87, and 88 per cent. in the year 1881. These figures, it was argued, showed that the disease had become worse and worse every year the Acts had been in force.

The speech of Dr. Newman I have just given, and I now reprint that of the Hon. Mr. Jones in full, as giving practically all that can be said or argued in favour of repeal; authorities are quoted and statistics are given, many of which can be easily disproved, and shown to be fallacious and misleading. Recent investigations have thrown much light on the subject, and one has only to watch what is now going on at "Home" to be able to declare emphatically that the Acts must be reinforced, and that speedily.

Hon. W. Jones: In consequence of the vigorous agitation, which was participated in by a large number of the best men of the United Kingdom, a Committee was set up to investigate into the operation of the Contagious Diseases Acts. That Commission, as he dared to say many hon. members would know, if they had read or glanced at the pamphlets, consisted of not moral reformers or Wesleyan preachers, or persons of that kind, who might be assumed by some to be carried away by sentimentality, but it consisted of: President, V.C., P.S.C., Lieut.-General Sir H. E. Wood, G.C.B., G.C.M.G., 9th October, 1893; Colonel H. Locock, H.P. Royal Engineers, 1st November, 1887; Surgeon-General Sir J. Faayer, K.C.S.I. (for India); Surgeon-General J. M. Cunningham, C.S.I., M.D., late Bengal Establishment (for India), 10th March, 1891; Surg.-Lieut.-Col. W. S. Pratt, M.B., 1st April, 1893; Sir D. Galton, K.C.B., F.R.S., late Capt. Royal Engineers, 1st July, 1890; Sir C. A. Cameron, Knt., M.D., 9th September, 1890. Nobody, he thought, would dispute the fitness of these men to judge on a subject of this kind; and, moreover, in order that they might ascertain the real facts of the case, and come to a sound opinion as to what ought to be done, they made a most exhaustive enquiry, and the conclusion they came to he would give as shortly as he could. This was the pith of the conclusion to which they came:—

"The rules for the prevention of venereal

diseases were prepared with great care, and every effort was made to administer them with success. Every year a report of each Lock Hospital was submitted to the Sanitary Department, and year after year suggestions were made and acted on for rendering assistance more effective. In every cantonment a special sub-committee was formed, whose duty it was to look to the working of the rules, to propose improvements, and generally to see that both the civil and military authorities, who were alike concerned, should pull together with that energy and co-operation which were essential.

"After years of unsuccessful result, it was still hoped that, with increased care and greater stringency, the desired end might yet be attained. But there can be no question that the outcome was a failure.

"Not only did the hospitals fail to effect a reduction in the ratio of venereal cases among European troops, but, as it happened, these diseases increased during the term of years in which they were in full operation.

"As a matter of fact, the ratio of admissions per 1,000 has decreased since the Acts have been abolished.

"The facts, so far as we can ascertain them, lead us to the conclusion that a compulsory Lock Hospital system in India had proved a failure, and that its re-institution cannot consequently be advocated on sanitary grounds. In stating this conclusion we may add that we are merely repeating the opinions which the Army Sanitary Commission have uniformly held, that venereal diseases in the Army of India could not be repressed by such restrictive measures, and in support of this statement we may refer to the memoranda on the Indian Sanitary reports, which have issued from this office for many years. We believe that the best practicable means of diminishing the prevalence of these diseases is to be found in establishing a system of voluntary Lock Hospitals, and in providing the soldier, as far as possible, with healthy occupation and recreation.

"Commanding officers should also be urged to encourage in every way all forms of athletic amusement, as physical fatigue acts as a deterrent to sexual indulgence."

Nobody, he repeated, could refuse to accept the guidance of such testimony on the part of such men. But a multitude of other witnesses had given evidence as to the operation of these Acts, which were supposed to have effected so much good in regard to the social evil. As the Hon. Sir George Whitmore had said he had read this evidence. There was a lady of

the name of Josephine E. Butler, associated with Sir James Stansfield, Privy Councillor, G.C.B., and ex-M.P. for Halifax—one of the gentlemen whom the hon. gentleman considered as unfit to give an opinion on the subject—Mr. James Stewart, M.P. for Shoreditch, London; Mr. Walter S. B. McLaren, ex-M.P. for the Crewe Division of Cheshire; Mr. Henry J. Wilson, M.P. for Holmfirth Division, West Riding, Yorkshire; and Dr. J. Birkbeck Nevins. Well, these persons—notable persons he might call them—had issued a circular on behalf of the British Committee for the Abolition of the State Regulation of Vice, in which they say:—

"The Secretary of State for War declared in the House of Commons, on 13th June, 1894, that although he was no fanatic on this subject, he had no desire to restore the Acts, and that there was no necessity to do so. The Indian Government has abolished the system entirely, and has passed an Act expressly forbidding any rules to be made for the Army which in any way involve the examination of women for the purpose in question. The Colonial Office has abolished the entire system in all our Crown Colonies with the best results. Public opinion in Europe is more and more strongly calling for its abolition in foreign countries. The system is immoral; by professing to make vice safe, and by placing it under State supervision and approval, it tends directly to increase immorality. The principle of all such legislation is that this vice is necessary, and therefore should be made so. It is more or less under the protection and implied approval of the Government, and therefore the presumption is that it cannot be an evil thing. Hence men are taught that they may without blame indulge in it; and a greater number do in consequence lead vicious lives, to their own destruction and that of their unfortunate victims.

"The system is unconstitutional, for it both destroys the civil rights of the unfortunate prostitutes and endangers the liberty of every other woman in the community. It forces women to submit to a compulsory personal examination of an odious nature not for any curative process, nor for her moral benefit, but to discover whether she is free from disease, so that she can continue her immoral life. To the lives of other women, especially those of the poorer classes who have to be out late at night, a new danger is added; and the experience of this and other countries proves that innocent young women have been arrested as prostitutes under the operation of these

special laws, and subjected to great indignities.

"The Acts were tried in England in 18 garrison towns, from 1869 to 1883, but the medical results were utterly insignificant, and no responsible person proposes to re-enact these laws."

He thought that these quotations showed that the Act, instead of being a deterrent, had been an incitement to the commission of the very evils, the very sin, which it was supposed to check. If hon. gentlemen wanted more of the same kind of testimony—and he supposed they really did, because he did not think his own opinions were worth much, as he had no personal experience of the subject—if they wanted more, let them read what Charles Bell Taylor, M.D., F.R.C.S.E., Fellow of the Medical Society, said in a speech in the House of Commons on the second reading of the Bill for the repeal of the Contagious Diseases Acts, 1866-1869. He said that he overheard a burly Frenchman remark to a pretty delicate-looking girl that if she did not accede to his wishes he would denounce her to the police and have her registered as a prostitute. Mr. Taylor asked, "But can he do this?" and was assured, "that nothing was more simple—that an anonymous letter would suffice, and that the police considered such information either from man or woman extremely valuable." Dr. Bell Taylor adds: "Subsequent experience in the streets, in the cafés, in the public saloons and hospitals of Paris, Berlin, Hamburg, and other Continental cities, confirmed my original impression. I saw that women who had as much right to walk about as any gentleman or lady of the land were afraid to walk about—that in point of fact they were arrested and violated simply for walking about—and I came to understand what a foul thing the so-called purification of our streets really was."

More than this: Notwithstanding this reign of terrorism, this elevating the lowest black-guard of a policeman to the position of a social mentor and guardian of souls, the same authority says he saw, "abounding on all sides, the worst forms of the vilest disease," and this was in the hot-bed of C. D.-ism.

Mr. Taylor also shows that the evils of the disease were greatly exaggerated; that the trouble amongst the soldiery and militiamen was infinitesimal; that out of 10,000 factory children examined there was scarcely a trace of the disease; that the reports of the children's infirmaries throughout Great Britain and Ireland show that among 266,000 sick children, only 1·4 were affected by hereditary disease of the

kind under discussion. This quite upset the theory that something must be done to combat this evil, though in combating it it must be necessary to degrade and to humiliate woman-kind, and lead to the driving of young girls into the streets—for that is really what this espionage meant.

(To be continued in a future issue.)

ABSTRACTS.

SHORT EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

IN the GACETA MEDICA of Mexico, November, 1897, Dr. Ramos relates a case of *rare orbital tumor* in a woman aged 40. Exophthalmos with palpitation and thyroid enlargement had lasted for seven years. The latter disappeared under treatment, leaving the exophthalmos.

Dislodgment of the eye had caused ectropion of the lower eyelid, and also corneal ulcer. Malignancy being suspected, she was sent to Mexico for treatment.

In consultation, enucleation of the eyeball before removal of the tumour suggested itself, but the duration of the growth, absence of pain, and, above all, the integrity of function, caused this idea to be negated.

An exploratory puncture released some fluid, which was found to lack any fatty element. An incision was then made along the eyebrow, which gave exit to a muco-purulent fluid, and it was found that the upper wall of the orbit had been destroyed, opening communication with the frontal sinus. Some pieces of necrosed bone were removed, and the cavity, after having been cleared and disinfected, was plugged with iodoform gauze.

The wound healed gradually without suppuration. Ocular movement became perfect except for slight ptosis, remediable by a trifling operation.

The tumour was myxomatous, and contained giant cells indicative of degeneration, but no cancer cell. The corneal ulcer left a fine cicatrix, but vision remains good, even for small type.

This case shows that when the optic nerve is stretched slowly and gradually vision is but slightly impaired.

Dr. Sosa gives notes of observations on *Epilepsy* made on the cadaver. He found a preponderance of old meningeal adhesions in various situations. He also records nine cases of cured meningitis, of which four remained epileptic.

He concludes:—(1) That cure of meningitis is not extremely rare. (2) That concomitance of antecedent meningitis and epilepsy was evident in his four cases. (3) That frequent post-mortem revelations of old pleural adhesions show that pleurisy may be passed undiagnosed, notwithstanding text-book descriptions, inspection, percussion, and auscultation; and that in like manner meningeal inflammations may pass unrevealed except for subsequent epilepsy, in spite of the terrifying description of meningitis given in text-books.

In the ANNALES DEL INSTITUTO MEDICO, Mexico, June, Dr. Orvañanos discusses the treatment of phthisis by rarified air with the indispensable conditions of cold, atmospheric dryness, and abundant sunlight. He remarks that the variety of pathological conditions renders special study of each case necessary.

It is quite usual for patients whose primary symptoms have disappeared and whose general health is improved after residence in a sanatorium, to consider themselves cured and to return to their homes where after a while the symptoms all recur. Speaking generally, residence of phthisical patients at high altitudes should be permanent to render their cures complete. Though there is no climate that of itself will cure, yet treatment will be more successful if climate be suitable. He reports at length some cases of early phthisis treated under different conditions, which developed into instructive contrasts.

In the MONITOR MEDICO, Lima, May, 1897, Dr. Carmona y Valle, contributes a study of *Acute Yellow Atrophy of the Liver*—endophlebitis, coagulation, sudden venous obstruction, rapid cell destruction, and early dissolution; of *Supra-hepatic Periphlebitis*—abundant interstitial proliferation preceding cell destruction, increase of volume and hardness of parenchyma, and slower course with time for appearance of ascites; and of cases of *Partial Endophlebitis* which correspond to neither of the foregoing. A series of excellent micro-photographs accompanies the paper.

MEDICAL ETHICS.

THE following case was discussed at a meeting of the Council of the N.S.W. Branch of the British Medical Association, held in the Editor's Library on 26th January:—

Dr. A. left his *locum tenens* (Dr. B.) in charge of his practice during his holidays. A patient asked for a consultation. The *locum tenens* (Dr. B.), instead of asking the consultant to visit the private residence of the patient, gave his card to the proposed consultant (Dr. C.), but instead of taking the patient as directed to the consultant suggested (Dr. C.), he was taken by his parents to another medical man (Dr. D.). Dr. D. advised an operation, and operated accordingly, and then placed the case in the hands of the other medical man of the town in which the parents resided, thus taking the case out of the hands of the *locum tenens* of Dr. A., whose patient the case really was, although informed by the patient's friends that Dr. A.'s *locum tenens* was previously in charge of the case.

The Council decided that Dr. D., knowing that the case was a patient of Dr. A., who was represented by Dr. B. (his *locum tenens*), acted in an unprofessional manner as a consultant in taking the patient from his charge, operating in his absence, and then placing him under care of another medical man competing with him in the same town.

Messrs. ANGUS AND ROBERTSON announce the appearance of Springthorpe and Mullins' *Diet-lists for Australian Medical Practitioners* in a new form. Owing to the large sale of these well-known lists the publishers have decided to issue the separate lists in sets of 50 in paper covers at 2s. a set. These lists comprise: 1, Albuminuria; 2, Anæmia and Debility; 3, Biliousness; 4, Constipation; 5, Convalescence; 6, Diabetes; 7, Diarrhoea; 8, Dyspepsia; 9, Gout; 10, Infant Feeding; 11, Phthisis and Wasting Disease; 12, Pyrexia. Those who prefer them in the present form may still obtain them at 3s. 6d. These diet lists have obtained an Australasian reputation owing to their completeness, and both authors and publishers are to be congratulated on their success.

PROCEEDINGS OF BRANCHES.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 5th annual meeting of the Queensland Branch of the British Medical Association was held on the 7th January, in their rooms, Edward-street. Present: Dr. E. H. O'Doherty (President), Hon. Dr. Marks, Drs. Francis, Orr, Hopkins, Carvoso, Macnamara, Comyn, and Maloney.

Dr. MARKS read the report of the Council for the year 1897.

REPORT OF COUNCIL.

Our roll of members showed 68 at the commencement of the year. To this has been added 11 names, viz.: Drs. T. E. Green, M. M. Lyons, L. G. Macdonnell, A. E. N. Browne, A. J. McDonnell, J. P. Ryan, G. E. Dennis, J. F. Nall, P. L. Townley, S. D. Read, and A. Nicoll.

By the resignations of Drs. G. Macdonald, J. Booth, and E. Tilston, and the lamented death of our old friend Dr. Hancock, we have lost four, and our muster roll now stands at 75. In this connection may be mentioned also the loss which the profession has sustained during the year in the removal by death of Drs. Mullen and Bell.

The financial position of the Society is still sound. There is a balance of £11, besides a little due for outstanding subscriptions for the year under review.

During the year there have been held ten general, one special, and eleven Council meetings. The following papers have been read:—

1. Retiring President's Address Dr. Marks.
2. Report of the Council on Medical Defence.
3. Notes on the Removal of a Dermoid Tumour, which was Axially Rotated Dr. Nolan.
4. Bullet Wound of Head—Extraction of Bullet on Sixth Day—Recovery Dr. H. Garde.
5. Sporadic Oretinism or Myxœdema Dr. Sugden.
6. Relation of the Medical Profession to the Friendly Societies.
7. Speculations on Some Cases seen in the Out-patient Department Dr. Jackson.
8. Notes on a Case of Hæmatemesis in Typhoid Dr. Halford.
9. Notes on a Case of Aneurism showing some Unusual Features Dr. Halford.
10. Statistics of Serum Reactions in Typhoid at the Hospitals, with Examples Dr. Halford.
11. Results of a Recent Investigation into the Prevalence of Typhoid Bacilli in Water, Food, Milk, &c. Dr. Halford.
12. On the Occurrence of Amphoric Respiration in the Course of Croupous Pneumonia Dr. Hirschfeld.
13. Case of Sourvy Dr. Dennis.

The Council note with much satisfaction that a respected member of the profession in Australia has received a mark of her Majesty's esteem in the knighting of Dr. Fitzgerald, of Melbourne.

At the instance of the Branch a conference was held in May to consider the relation of the profession to the Friendly Societies, when an interesting discussion took place. A committee was formed to consider the best steps to be taken to induce Friendly Societies to establish a wage limit, and to remedy other grievances under which the profession labour. In connection with this conference the Council organised a river trip, at which the members of the Branch had the pleasure of entertaining a number of their brethren.

Correspondence has been conducted during the year upon matters of interest to the members of the profession, notably with the Commissioner of Railways anent fees for examining candidates for employment, and with the Commissioner of Police, chiefly upon the

question of the rectitude of burying bodies found in the bush upon a Police Magistrate's order without *post-mortem*.

Dr. A. J. McDonnell, of Toowoomba, was appointed to represent the Branch at the annual meeting of the Association, held at Montreal in July last. Dr. McDonnell's report of his entertainment by our Canadian brethren was very gratifying.

Five members of the Branch have been appointed as its representatives on the executive of the Intercolonial Medical Congress, to take place in Brisbane in 1899.

The election of office-bearers for 1898 resulted as

follows:—President, Dr. F. G. Connolly; Vice-President, Dr. H. A. Francis; Council, Drs. Marks, O'Doherty, Hopkins, and Mayne; Hon. Sec. and Local Editor *A. M. Gazette*, Dr. E. S. Jackson; Hon. Treasurer, Dr. A. W. Orr; Auditors, Drs. Macnamara and Carvosso.

Dr. O'DOHERTY then read his Presidential Address. (See page 47.)

Dr. FRANCIS moved, and Dr. MARKS seconded a vote of thanks to the President for his address. This was carried unanimously, and suitably acknowledged by Dr. O'Doherty.

BRITISH MEDICAL ASSOCIATION—QUEENSLAND BRANCH.

DR.	BALANCE-SHEET FOR 1897,				CR.			
1897—Dec 31.								
To balance from 1896	...	...	£12	0 0	By Subscriptions to parent Association	...	£78	15 0
„ Subscriptions	...	...	106	12 6	„ Subscriptions to <i>A. M. Gazette</i>	...	18	9 0
„ Subscriptions <i>A. M. Gazette</i>	...	...	16	5 0	„ Rent	...	7	8 6
„ Subscriptions "Otter" trip	...	...	5	2 0	„ Postage, exchange, and petty cash	...	11	7 0
					„ Refund (Dr. Voss) sub. <i>A. M. Gazette</i>	...	0	15 0
					„ Expenses "Otter" trip...	...	7	0 0
					„ Assistant...	...	5	5 0
					„ Balance to 1898...	...	11	0 0
			<u>£139</u>	<u>19 6</u>			<u>£139</u>	<u>19 6</u>

Examined and found correct.

7th January, 1898.

JOHN URE,
GEO. COMYN, } Auditors.

A. W. ORR, Treasurer.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting held at the Adelaide Children's Hospital, on January 29th, 1898. Present:—The President (Dr. Giles), Drs. Swift, Lendon, Corbin, Poulton, Stewart, Evans, A. E. Wigg, H. H. Wigg, Lynch, Borthwick, A. A. Hamilton, G. C. Hayward, Morgan, Cavenagh-Mainwaring, Bickle, Norman, Gregerson, Clindenning, Fischer, Gault, Gunson, Moule, and the Hon. Secretary, Dr. W. T. Hayward; the Hon. Allan Campbell, M.L.C., and Dr. E. A. Johnson as visitors.

CLINICAL EXHIBITS.

Dr. LENDON shewed rheumatic nodules (diffuse); idiopathic muscular atrophy; pemphigus.

Dr. SWIFT shewed case of hydatid of liver successfully operated on; tracheotomy in diphtheritic paralysis, cured; basal meningitis.

Dr. HAYWARD shewed case of sarcoma of rib cured by arsenic; empyema, in which chest was washed out and drainage tube removed the day after the operation, and not replaced.

Dr. WIGG shewed, with skiagrams, fracture of wrist-joint; compound fracture of tibia and fibula on left side, cured.

Minutes of last meeting read and confirmed.

Dr. SWIFT moved, and Dr. H. H. WIGG seconded,—“That a letter of sympathy be forwarded to Mrs. O'Connell on the death of her husband, the late Dr. O'Connell.” Carried.

Dr. LENDON proposed, and Dr. POULTON seconded,—“That the Council be requested to send a letter of

sympathy to Mrs. Ernest Hart, expressing the appreciation by the S. A. Branch of the great services rendered by her late husband to the British Medical Association.” Carried.

On the motion of Dr. POULTON, it was decided,—“That the Council be requested to take into consideration the question of Medical Defence, and to communicate with the Medical Defence Associations of New South Wales and Victoria, with a view to the formulation of a scheme.”

The meeting then adjourned to the Bacteriological Laboratory.

Dr. BORTHWICK read a paper on “The Work done and the Methods employed in the Bacteriological Laboratory of the Adelaide Children's Hospital.” (See p. 58.)

Drs. BORTHWICK and MORGAN subsequently gave a demonstration of bacteriological methods and apparatus.

Dr. HAYWARD expressed appreciation of the enlightenment and public spirit shown by the Board of Management of the Adelaide Children's Hospital in erecting and equipping so valuable a laboratory. He moved,—“That the thanks of this meeting be accorded to the Board for inviting the Branch to meet at the Children's Hospital.” Seconded by Dr. MICHIE, and carried by acclamation. At the request of the President, Dr. Campbell consented to convey the resolution to the Board.

The *Therapeutic Gazette* for December 15th devotes a page and a half in quoting from a paper contributed to the *Australasian Medical Gazette* for April by J. Murray Gibbes, M.D., Border Town, S. Australia, on the “Cold Air Treatment of Typhoid Fever.”

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

AUCKLAND SECTION.

THE 150th general meeting was held on September 8 1897. Present: Dr. Robertson (Vice-President, in the chair), Drs. Dawson, Rowley, Hooper, Wine, Purchas, Lewis, and Walker (Hon. Sec.).

Minutes of last meeting were read and confirmed.

The following gentlemen were balloted for, and admitted members of the Section, viz.: Drs. Coates, Somerville, and McDowell.

The following letter was read from Dr. Wright, of Parnell:—"Dr. F. W. Wright's compliments to the Auckland Section N.Z. B. of B.M.A., and begs to offer for their acceptance some books from the late Dr. Stratford's library, which he thinks may be curiosities. Selwyn Lodge, Parnell, 31st August, 1897." The books consist of several volumes of "Bell's Surgery" and other medical works.

Dr. HOOPER moved, and Dr. WINE seconded,—"That a letter be sent by the Hon. Sec. to Dr. Wright, thanking him for the valuable works presented."—Carried unanimously.

Dr. ROBERTSON moved, and Dr. DAWSON seconded,—"That Mr. Crawford's account for £2 10s., as registrar to the nurses' directory, be paid up to the end of June."—Carried.

The executive reported that they had not yet completed the revision of the by-laws.

Dr. PURCHAS read a paper on a case of uterine fibroids, which he had removed from a patient. One tumour was located in the anterior portion, and the other in the posterior portion of uterus. The operation of removal was highly successful, and the patient is now quite well. He exhibited the specimens to the meeting.

Drs. HOOPER and ROBERTSON mentioned cases of imperforate anus in newly-born infants.

Dr. LEWIS exhibited specimens of the ovaries, which he had removed from a single woman. One ovary was very hard and calcified, and the other quite soft.

The 151st general meeting was held on Oct. 13, 1897. Present: Dr. Robertson (in the chair), Drs. Rowley, Dawson, Coates, Purchas, and Walker (Hon. Sec.).

Minutes of the previous meeting were read and confirmed.

A communication was read from Dr. Graham Campbell, Secretary of the N.Z. Branch of B.M. Association, re subscriptions to the *British Medical Journal* and *Australasian Medical Gazette*.

It was moved by Dr. ROBERTSON, and seconded by Dr. DAWSON,—"That members who have paid their subscriptions for twelve months, and only received *British Medical Journal* for six months, be entitled to a refund for a corresponding period, say, 10s. 6d., and the names of those desiring journals for a whole year be forwarded to General Secretary, with a request that they be ordered from London."—Carried.

Dr. PURCHAS moved, and Dr. COATES seconded, re Dr. Boyd's Christchurch letter,—"That this Section is in full accord with contents and proposals of the same."—Carried.

This circular letter refers to patent and proprietary medicines, and the Canterbury Section propose to approach the Government with the view of having legislation to protect the public against such medicines.

A letter was read from Mr. Church, re some medical

works he had for sale, and which he had sent for approval or otherwise. It was resolved that Drs. Dawson, Robertson, and Walker examine the books, which they did at the conclusion of the meeting, and selected the following to be added to the library, viz., "Treatment of Ligaments" (Cooper) and "Treatise of Dislocations" (Astley Cooper).

Dr. PURCHAS mentioned a case of severe injury to a child's hand. The case was taken to a chemist, who offered to undertake it and sew up the injuries, but the patient's parent refused his services, and took the child to a surgeon, who had to call in the assistance of another medical man to administer chloroform, in order to stop the hæmorrhage and suture the wound. Dr. Purchas asked the question, "Can we do anything to stop chemists from undertaking such surgical cases?"

A discussion ensued, and it was clearly shown that we have no protection against anyone not qualified from practising surgery. The question of administering anaesthetics to patients, especially in dentists' practice, was argued at some length.

Dr. ROBERTSON exhibited a specimen of a fetus, at or about 3½ months of gestation, the peculiarity of which was that the lower extremities were joined or grown together.

Dr. PURCHAS read notes of a case of a female who had retention of urine.

The 152nd general meeting was held on Nov. 10, 1897. Present: Dr. Rowley (Junior Vice-President, in the chair), Drs. Dawson, Coates, Wine, King, Pabst, and Walker (Hon. Sec.).

Minutes of last meeting were read and confirmed.

Letter received by Dr. Dawson (Treasurer) from Dr. Campbell, Christchurch, re list of members who had paid their subscriptions.

A letter was read from Dr. King, complaining of persons calling for death certificates some weeks, and even months, after the patient was dead.

It was resolved, on the motion of Dr. PURCHAS, seconded by Dr. KING,—"That the Hon. Sec. see the Registrar of Births and Deaths, in order that better arrangements be enforced regarding the delay in registering deaths."

The business paper of the Council meeting to be held in Wellington on 13th November, 1897, was read, when the following resolution was carried, on the motion of Dr. PURCHAS, seconded by Dr. WALKER,—"That Dr. Fell be asked to act as delegate for the Auckland Section of such meeting, and that he be instructed to support Clause C of Section 5, i.e., that each delegate shall exercise the full number of votes to which his section is entitled, and also Clause 6, that no member examine a case of life assurance under a fee of one guinea."

In reference to Clause 5, Section B, it was resolved that each sectional secretary be notified of the date and place of annual meeting of the Council.

The Hon. Sec. placed on the table a copy of the proposed amended Medical Practitioners Registration Act.

A communication from the Canterbury Branch on the above Act and proposed new Contagious Diseases Act, 1897, was received; also a communication from Dr. Boyd, Christchurch, enclosing a copy of circular to the Minister of Justice re inquests and advertisements and use of medical titles by unqualified persons.

The consideration of the latter was adjourned owing to the lateness of the hour.

The December meeting lapsed for want of a quorum.

CANTERBURY SECTION.

A meeting of the above was held in the Canterbury Caledonian Society's Rooms on December 9th, 1897, at 8 p.m. Present—Dr. Thomas (in the chair), Drs. Symes, Hacon, Manning, Jennings, Campbell, and Boyd. Dr. Ninian Trotter was present as a visitor.

An apology for absence was received from Dr. Irving, who was out of town.

Dr. CAMPBELL read, for Dr. Murray-Aynsley, of Eketahuna, "Notes of a Year's Midwifery in a Country District." (Published in the January issue of *A. M. G.*, p. 17).

In the discussion, Dr. BOYD called attention to the sloughing which may follow the hypodermic injection of ergot. He attributed the alleged failures of private practice in reducing the percentage of septic cases, as compared with that of lying-in-hospitals, to the inefficient nursing.

Dr. HAACON congratulated the author of the paper upon his record of good results, and upon his continued interest in his old section. He pointed out that sublingual medication was free from the risks of injections, and was equally effective. He valued the genupectoral position in certain cases, and thought it was of special service in the locked heads of twin pregnancy.

Dr. THOMAS referred to a multipara whom he had attended in her twelfth confinement. The patient persisted in kneeling forward during labour. She had always adopted it in her previous labours, and found it of great assistance.

A vote of thanks was accorded to Dr. Murray-Aynsley for his interesting record of cases.

Dr. HAACON read extracts from a recent Blue Book by Dr. Monckton Copeman and Sir Rich. Thorne Thorne on "The Management of Calf Lymph and Vaccination." He exhibited some very interesting photos on the subject.

A paper by Dr. Hislop (Geraldine) on "Rigidity of Os Uteri Treated Satisfactorily with Hot Baths" was read for the author.

An ordinary monthly meeting of the Section was held in the Society's Rooms on January 13th, 1898, at 8 p.m. Present—Dr. Pairman (President, in the chair), Drs. Campbell, C. M. Anderson, Fenwick, Hacon, Irving, Thomas, and Symes. Drs. N. Trotter and Orchard were present as visitors.

The Hon. Sec. was instructed to write to a local chemist requesting discontinuance of his label "Dr. Gerald Harper's Influenza Cure." Dr. Thomas undertook to interview privately the said chemist.

Drs. Campbell, Fenwick, and Symes were appointed to draft a letter to the City Council on the subject of the Morgue.

A cutting from the *Timaru Herald*, which mentioned in favourable terms one of the hospital surgeons in relation to an operation, was brought before the meeting. The Hon. Sec. to write to the Editor with the view of preventing such a form of advertisement, and a copy of the letter to be forwarded to the surgeon in question.

The Hon. Sec. was authorized to print and distribute copies of the Bylaws of the Section.

Dr. Jennings wrote, desiring to sever his connection with the Section. His decision gave rise to general expressions of regret.

The Hon. Sec. was instructed to invite nominations, in the next notice paper, for two members of committee in the place of Drs. Jennings and Boyd.

Dr. IRVING read a retiring Presidential Address (see p. 49), in which he gave special prominence to

the subject of cremation, and alluded in eloquent terms to the grave loss sustained by members of the B.M.A. in the recent death of Mr. Ernest Hart.

A vote of sympathy and condolence was directed to be conveyed to the family of the late Mr. Ernest Hart, as also to the parent Society.

Dr. CAMPBELL read a paper by Drs. Barclay and Cruickshank (Waimate), on "Abscess of the Thyroid Complicating a Case of Pleurisy" (which will appear in a future issue). This was of considerable interest, and a long discussion followed.

Dr. FENWICK mentioned that a similar case had occurred nearer to Christchurch. He gave a few details of a case of Angina Ludovici, in which similar symptoms had exhibited themselves, but in this he believed syphilis was the cause of the blood poisoning.

Dr. HAACON suggested it was a case of neglected influenza.

Dr. PAIRMAN mentioned a case occurring in his own practice, where the patient suddenly became insane. He had tried the Thymus Extract.

Dr. ORCHARD afforded details of a case where Thyroid Extract only aggravated the symptoms, and mentioned one of sudden death during electrolysis.

Dr. SYMES considered Thymus Extract to be useful in Exophthalmic Goitre, but ineffective in the ordinary goitre. He had used Splenic Extract, and found an increased number of white corpuscles in the blood. He drew attention to a sexual form of insanity occurring in goitrous boys. He had seen several cases.

Dr. HAACON stated that he had declined to examine a solicitor for admission into a local lodge. The lodge had written to him requesting to know his reasons, and he had referred it to the President of the Section. He now left this matter in the hands of the committee of management, and trusted that members would loyally back up the position he had taken up.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

The 133rd general meeting was held on February 1st, 1898, in the Society's rooms. Present: Dr. Francis (president), Drs. Wheeler, Hardie, Hopkins, Orr, Love, Hill and Turner.

Dr. HOPKINS showed a renal calculus of very irregular shape, evidently moulded to the dilated pelvis, removed from a suppurating kidney in a woman 40 years of age.

ELECTION OF OFFICE-BEARERS FOR 1898.

The result of the ballot was announced as follows:—President, J. A. Wheeler, M.B., B.S. Lond., M.R.C.S. Eng. Vice-presidents, H. Alex. Francis (*ex off.*), M.B., B.C. Cantab., M.R.C.S. Eng., L.B.C.P. Lond.; J. S. Clowes, M.R.C.S. Eng., L.S.A., Lond. Treasurer, David Hardie, M.D., C.M. Aberd. Secretary, A. Jefferis Turner, M.D. Lond., M.R.C.S. Eng. Council, G. H. Hopkins, L.B.C.P. Lond., F.R.C.S. Eng.; Wm. N. Robertson, M.B., C.M. Edin.; A. B. Carosso, M.B., C.M. Edin. Auditors, John Thomson, M.B., C.M. Ed.; — Moloney, L.B.C.S.I., L.K.Q.C.P.I.

Dr. TURNER read a paper on "A Rare Form of Hepatic Cirrhosis," which will appear in our next issue.

DINNER TO DR. F. NORTON MANNING.

On Wednesday, February 9th, a complimentary dinner was given by members of the medical profession to Dr. Manning, at the Australia Hotel, on the occasion of his retiring from the public service as Inspector-General of the Insane. There were present:—Drs. J. A. Reattie, F. M. Blackwood, A. J. Brady, R. Bowman, W. S. Brown, W. Chisholm, C. U. Carruthers, A. A. Cohen, D. Collingwood, W. H. Crago, C. P. B. Clubbe, E. Chisholm, R. G. Craig, W. H. Coutie, Challands, Hon. Dr. Creed, Drs. J. Adam Dick, R. Dick, T. Evans, R. L. Faithfull, J. Foreman, T. H. Fiaschi, Inspector-General Fosbery, Drs. J. F. Flashman, Jas. Graham, E. Godson, A. Jarvie Hood, G. T. Hankins, A. J. Harwood, H. B. Hetherington, E. J. Jenkins, Sydney Jamieson, Samuel T. Knaggs, T. S. Kirkland, H. S. Lloyd, E. S. Littlejohn, H. Lillie, Hon. Dr. H. N. MacLaurin, Drs. Charles MacLaurin, M. A. B. McCarthy, A. MacCormick, J. McDonagh, G. Lane Mullins, Hon. C. MacKellar, Drs. J. F. McAllister, G. E. Miles, J. Morton, A. Mills, C. W. Morgan, S. H. MacCulloch, Gordon MacLeod, P. E. Musket, W. Odillo Maher, W. McMurray, L. E. F. Neill, F. A. Pockley, E. U. Russell, C. Ross, R. Scot Skirving, W. G. C. Smith, E. Sinclair, E. T. Thring, R. B. Trindall, R. H. Todd, J. Ashburton Thompson, A. J. Vause, Ralph Worrall, W. E. Warren.

The following gentlemen wrote regretting their inability to attend:—Drs. J. L. Beeston, Beith, L. Bernstein, F. H. Cox, Cotton d'Englesqueville, H. M. Curtayne, W. L'Estrange Eames, A. Foster, R. E. Grigson, Geo. Goode, John Gibson, J. W. Hester, W. S. Harvison, Geo. Hurst, T. W. Lee, V. E. Ludlow, A. Watson Munro, T. A. Machattie, L. G. Mallam, Mr. Justice Manning, Drs. W. Middleton, W. J. B. Nickson, F. S. Pilkington, W. Pierce, Sir Alfred Roberts, Drs. G. E. Rennie, O. H. Reddall, F. C. S. Shaw, H. J. H. Scott, F. C. Stevenson, Russell Watson, R. A. Wilson, Geo. Watt, G. P. M. Woodward.

The Hon. Dr. H. N. MacLaurin presided. Only two toasts were on the programme—"The Queen," and "Our Guest."

Dr. MACLAURIN briefly proposed the health of Dr. Manning.

Dr. MANNING replied as follows:—

It is impossible for me to thank you in an adequate manner, or in fitting words, for the very great honour you have done me in asking me to meet you this evening, or for your thoughtful kindness, which I thoroughly appreciate, in adding to my pleasure by inviting some of my oldest and most attached friends to meet me, and in placing my friend Dr. MacLaurin in the chair. I made Dr. MacLaurin's acquaintance before I came to the colony, and when we both wore the blue cloth and brass buttons of Her Majesty's navy. Our friendship has continued ever since. I am indebted to him in more ways than I can say, and it was a happy inspiration that made you select him as the chairman this evening.

It is a satisfaction, gentlemen, to every man to be tried by his peers. It is a keen pleasure to me that those best qualified to judge of me and of my work have seen fit to ask me to meet

them here this evening, and deputed the Chairman to say kind things of me—kinder than I deserve. For the moment it is an ordeal to stand before this large gathering, but the occasion will furnish one of the happiest reminiscences of my life.

I should like, Mr. Chairman and gentlemen, with your permission, to say a few words with regard to my work in connection with the Lunacy Department. My other work has been more or less episodic in character. This has been the work of almost a lifetime.

In a few days I shall complete the thirty-eighth year of my professional life, and it has been my ill fortune never to have spent a single day of this long time in the exercise of the general practice of our profession. I have spent all my time in hospital work, or in the public service, but I have from the beginning, and always, done my best to keep closely in touch with my professional brethren. I have tried to be, and been proud of being, Doctor first and Official afterwards. For many years I was seldom absent from the gatherings, scientific or social, of the medical profession, and if I have of late years been more frequently an absentee it has been my misfortune, and not my fault.

Circumstances have favoured me in keeping up the active connection with, and the knowledge of, its members, which I have so much prized. For some years as a Director of the Prince Alfred Hospital, and again, and later, as Medical Adviser to the Government and President of the Board of Health, the offices now so worthily filled by Dr. Ashburton Thompson, I was brought into intimate relations with the great body of our profession; and more lately still as Lecturer and Examiner at the University in Psychological Medicine, I have made the personal acquaintance, at least, of the younger members on their way from the University to the practical work of life.

When first I came to this colony, a young and unknown man, I was taken by the hand and welcomed by such men as the late Mr. Charles Nathan, Dr. Boyd, Dr. Bennett, Dr. Alleyne, Dr. Fortescue, and by Sir Alfred Roberts, and others happily still with us, and ever since that time I have received the greatest kindness and consideration from the great body of the profession in this colony.

I owe to some, attention and care during sickness, to others advice and help in time of difficulty, and to all a considerate kindness which I can never forget. And now, gentlemen, you have given up your time and have come, not only from Sydney and its suburbs,

but from Newcastle and even more distant parts of the colony, to do me honour.

The circumstances at the time I entered on the duties of office were peculiar. Dr. Greenup had been lately murdered by a patient. The late Dr. Campbell had resigned after twenty years of eventful and trying service, and associated with the late Mr. Wardley (than whom a better man never lived) we found ourselves in charge of something over 1000 patients in Parramatta and Gladesville, of whom considerably more than one-half were under my care at the latter place, then known as Tarban Creek.

The condition of matters was deplorable, and here let me say that I believe that this was in no way due to want of energy or care on the part of the two learned, able, and honourable men I have mentioned. They worked hard, and did much. When I took charge of Gladesville there was no patient in mechanical restraint, but the place itself was a prison; and Parramatta, all the buildings at which had been used as prisons in the very early days of this colony, was much worse.

There were no gardens, no flowers, no amusements, none of the amenities of life, and the officers and staff were almost as badly housed as the patients. The colony was in a condition of commercial depression. Few took any interest in the condition of the insane, and the days of General Hospitals and of Hospitals for the Insane had not yet come. If hospitals, as has been well said, are in some sort the measure of the civilisation of a people, then at that time New South Wales was not altogether a civilized community.

At the same time the overcrowding was alarming, and on my first night in office, when I picked my way armed with a big bunch of some twenty heavy keys, some of them formidable weapons, and a lantern (for there was neither lamp or gas-jet in the place), among the patients spread out on the floor of every room, without bedsteads, and as thick as they could lie, I confess that my heart sank within me. I had, however, put my hand to the plough, and I was not going to turn back. Mr. Wardley had no assistant medical officer. My assistant was an elderly gentleman in weak health, who was soon called to his rest; but we set to work, and gradually, very gradually, matters improved. It was ten years, however, before even the Medical Superintendent of Gladesville had a house to live in at the Hospital. It was sixteen or seventeen years before the awful old cells occupied by women at Parramatta were swept away. A Minister of the Crown was at

last induced to visit the place, and I took the opportunity of shutting him into one of these cells for a few seconds. Then they were doomed.

We commenced, as I have said, with something over 1000 patients in two hospitals. At this moment we have nearly 4000 in five large institutions, the youngest and most beautiful of which, at Kenmore, near Goulburn, will, ere this year is out, have accommodation for 500 patients. We were at first three Medical Officers; now a very competent staff of twelve find full occupation.

Every year as it has gone by has left us with 100 more insane patients in our wards, and for these buildings, furniture and bedding, with all the numerous accessories of a home, have had to be provided, whilst at the same time slowly but surely the old buildings have been re-modelled, demolished, and re-built.

In delivering the Harveian Oration at the College of Physicians some years ago, Sir George Paget said:—"An Asylum for the Insane, such as may be seen in our English counties, with its pleasant grounds, its airy and cleanly wards, its many comforts, and its wise and kindly supervision provided for those who have to bear, only too often, the double burden of poverty and mental derangement, I say this sight is to me the most blessed manifestation of true civilization the world can present."

This sight, I hope, we can now show in each and all of the Hospitals for the Insane in this colony.

Whatever success has attended the large work of the last 30 years has been due mainly to three causes:—

- 1st To the fact that the Government has allowed me the nomination of all officers and the selection and appointment of all other members of the staff; and you may be sure that I have tried to select the best men available.
- 2nd. To the energy, the loyalty, and the self-sacrifice of those who have worked with me, and here I speak not only of the medical officers, who I am proud to reckon among my personal friends, but to the rank and file, and of these particularly the charge attendants and nurses, whose services—arduous and constant—are not sufficiently acknowledged; and
- 3rd, and by no means least, to the generous appreciation and help of the medical profession.

For the 30 years over which my reminiscences extend, upwards of 13,000 people have

been admitted to our hospitals, of which considerably over 6,000 have been discharged clothed and in their right mind, whilst others, reckoned, indeed, by hundreds, have been handed over to the charge of friends, quiet, harmless, and fit for home care.

Turning for one moment to the future. No one is more keenly alive than I am to the large work yet to be done. My successors in office will have quite as much to do in the future as I have had in the past, and in providing asylums for the inebriate, now an absolute necessity, in providing for the more scientific study of insanity from a pathological standpoint, which modern science and modern methods have rendered possible, and in providing for the needs of the ever-increasing insane population, they will need the help of the medical profession and the weight its intelligent opinion can bring to bear on great social questions. Such help I am sure will be forthcoming.

Mr. Chairman and Gentlemen,—I do not altogether willingly cease from my work. Six years ago I felt obliged to lay down the offices of Medical Adviser to the Government and President of the Board of Health, which my good friend, Sir George Dibbs, had placed in my charge. I have been lately warned that rest is necessary, and that it is well for me to retire from official work, which of late has been more burdensome and less pleasant.

Work in connection with the insane is admittedly trying and anxious. In England, where this is fully recognised, the age for voluntary retirement from this work is fixed at 55, and for compulsory retirement at 60. I think I may now with fairness, and even with advantage to the public service, step on one side, and leave the continuance of a great work to younger, to more efficient, but not more willing hands.

Mr. Chairman and Gentlemen,—I thank you for all your kindness, and for the great honour you have done me. (Cheers.)

The CHAIRMAN then presented Dr. Manning with a handsomely illuminated menu of the dinner, containing the names of all the gentlemen present. The menu was in book form, bound in padded morocco, bearing Dr. Manning's monogram in gold, and was a work of art executed in Mr. John Sands' best style.

The health of Mr. E. Fosbery, Inspector-General of Police in New South Wales, an intimate colleague of Dr. Manning, was then honoured with enthusiasm.

Mr. De Groen's band played selections during the evening.

THE *Medical Annual* for 1898 will contain contributions on Australian Diseases, by Drs. David Hardie (Brisbane), G. Lane Mullins (Sydney), J. W. Springthorpe (Melbourne), and Chas. Edwd. Todd (Adelaide).

LETTER TO THE EDITOR.

MEDICAL CERTIFICATES OF DEATH.

(To the Editor of the Australasian Medical Gazette.)

SIR,—A child, A. B., died owing to burns accidentally received thirty-one hours previously. I attended the child to the time of death. I wrote a letter to the coroner stating the fact of death, mentioning that the child died in convulsions and from shock following the receipt of the injuries, and asking him to be good enough to issue a burial order. This letter I left open, with instructions to give it to the local police officer. The senior police officer sent it on with his report to the coroner by the father. The coroner, on receipt of letter and report, informed the father it was not necessary for him "to put pen to paper," and sent him back to me to obtain a certificate of death. Under protest, I gave a certificate of death. I should be glad of your opinion on the following points:—

- (a) Can a medical man *legally* give a medical certificate of death in cases of violent death?
- (b) Is it legally incumbent on a medical man to inform the coroner of cases of death from violence?
- (c) In cases where notice of death from violence has been reported to the police or coroner, or both, should a medical certificate of death be given subsequently under any circumstances whatsoever?
- (d) Is a Registrar of Births, Marriages, and Deaths allowed to give a burial order (1) when a certificate of death is refused in cases of violent death, (2) when such a certificate of death from violence is given without communicating with the coroner?
- (e) Was I justified under the circumstances detailed above in giving a certificate of death as resulting from convulsions and shock following the receipt of injury—to wit, burns?

Yours faithfully,

ONE IN DOUBT.

[This letter is dated from a country district, and the following replies may interest country practitioners:—

- (a) A coroner has very great powers of discretion regarding the holding of inquests. It rests with him whether he holds an inquest with a jury of four or more persons, or conducts a magisterial inquiry; or, having made personal inquiries, he may either give an order for burial, or sanction a certificate of death being given by a medical man who has become so seized of the facts of the case, and is satisfied that death has not been caused by criminal act or negligence.
- (b) Certainly. The usual method to be adopted by the medical man is to decline to give a certificate of death, and refer those interested in the deceased to either the Registrar of Deaths, the coroner, or the police. Should he know that death is caused by a criminal act, it is his duty to report to the authorities, or he is liable to prosecution as an accessory to a crime.
- (c) This question is answered under (a).
- (d) 1. No. It is then his duty to await the decision of the authorities. 2. Under these circumstances such a certificate should not be given without the sanction of the coroner.
- (e) Having satisfied yourself that death was accidental, and having received the sanction of the coroner, you were justified in giving the certificate.—Editor, A.M.G.]

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

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THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
F. G. CONNOLLY, BRISBANE, Q.; J. W. SPRINGTHORPE,
MELBOURNE, VIC.; W. T. HAYWARD, ADELAIDE, S.A.
AND L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 21ST FEBRUARY, 1898.

EDITORIALS.

IRREGULAR MEDICAL PRACTICE IN NEW SOUTH WALES.

THE *Medical Press and Circular* of January 5 last refers to the editorial which appeared in our issue of November in reference to the absence of any law regulating medical practice in New South Wales, and of the peril to which the public is exposed by the conduct of the irregular practitioners who run riot in this

colony as the consequence of this defect. Our contemporary is politely eulogistic on the article, and expresses the astonishment of the editor that "such things be." At the same time a remedy is suggested which, with the knowledge we have of the subject, is amusingly feeble. The passage reads as follows: "The only step which it appears to us should be taken by our confrères in New South Wales is to call a meeting of the whole profession, and by such means draw public attention to the scandal. It would then be easy to frame certain resolutions dealing with the matter, with a view to submitting them to the Government." The writer seems to be quite unaware that the profession in New South Wales has very prudently abstained from taking any action which might be misrepresented by those interested in delaying reform as being taken in their own pecuniary interest, but at the same time it has collectively and individually never missed an opportunity of forcibly calling attention to the imposition and injury to which the public is liable through the uncontrolled practice of these charlatans and cheats. The various medical associations have on every fitting occasion passed resolutions, and addressed communications to successive Governments pressing for due attention to this crying want.

As an instance of individual action, we can refer to the Select Committee appointed by the Legislative Council on the motion of the former editor of this journal, the Honorable J. M. Creed, who was elected its Chairman, which, after calling upon a number of witnesses who were in a position to give important evidence, among the number being many quacks who were compelled to give their own history, reported very fully as to the danger to the public and the urgent necessity for legislation, in 1887. This report created such sensation that it is almost impossible to realize that no action was taken, the then Premier, Sir Henry Parkes, quietly ignoring it. No greater proof can be given of how absolutely unjustified was the inaction of this pseudo-statesman than the following letter addressed to him by most highly representative men:—

"The Honorable Sir Henry Parkes, K.C.M.G.

"Sir,—We desire to bring under the notice of yourself and colleagues, as forming the Government of this Colony, the practical absence of any law in any way controlling the practice of medicine and surgery in New South Wales, or granting such protection to the public as would enable its members to ascertain promptly and surely whether persons practising as medical practitioners have really passed through the necessary course of training or have really obtained the diplomas they claim to possess. The terrible evils consequent upon this state of the law have been so

forcibly brought under our notice by the publication of the evidence given before the Select Committee of the Legislative Council that we feel it is but a duty incumbent on the occupants of the offices which we hold to make representations of the urgent necessity for such prompt legislative action as will remedy them. Feeling, also, that it is not advisable that a measure of such vital importance to the public well-being should be introduced by a private member, we most respectfully ask that you, as Premier, and the other gentlemen of your Government, will take the matter into earnest and early consideration, and that you will introduce a Bill during the coming Session of Parliament for the regulation of the practice of medicine and surgery in New South Wales.

"We have the honor to be, Sir, your obedient servants, — Alfred Stephen, Lieutenant-Governor; Fredk. M. Darley, Chief Justice; Patrick, Cardinal Moran, Archbishop of Sydney; Alfred Sydney, Primate of Australia; S. A. Joseph, President Sydney Chamber of Commerce; A. J. Riley, M.P., Mayor of Sydney; Chas. Bright, Chairman of the Baptists' Union, N.S.W.; William G. R. Stephenson, President of Wesleyan Conference; Alexander Barnard Davis, Rabbi of Jewish Congregation in N.S.W.; James Hill, M.A., Chairman Congregational Union, N.S.W."

It is difficult to conceive that any man, much more one who had been accepted by the country as its leader on more than one occasion, should have been so oblivious of his duty as to have allowed the state of things exposed by the Select Committee to continue a single day after the next meeting of Parliament without a bill being introduced to remedy the evil. Had his own intelligence been insufficient to have shown him its urgent necessity, surely the representations of the men whose signatures were appended to the above letter should have done so. He did nothing, nor have the present Ministry done more than to introduce an abortive bill which, if passed, must of necessity prove comparatively impotent. A promise of such a bill is regularly made in every speech addressed by the Governor to Parliament on its opening, but there the matter ends. As we pointed out in our article of November, the "Labour Party," if it realized its duty towards the class which it claims to represent, should feel its responsibility sufficiently to insist on steps being taken to protect the poor and ignorant sick from being exploited by the cheats, as the deficiency of our laws now permits to be done with impunity. If it were possible to get the information, it would be interesting to know whether the irregular practitioner who stated to late Ministers that every medical bill brought forward costs him fifteen or sixteen hundred pounds is still as profuse in his expenditure for this purpose, and if so who are the lucky recipients. Sums of money like this are not distributed haphazard, and the resulting absence of legislation goes to show that they have been allotted with much judgment.

We think it might be well for all the medical societies in the colony, through their respective presidents, to present a petition to Parliament on its reassembling, reciting the whole history of the subject, and pointing out the necessity for a law being passed. This we hope to see done, and therefore commend it to their consideration.

We commenced by pointing out to our contemporary, the *Medical Press and Circular*, the inadequacy of the course it proposed, and called its attention to what had been done. We would refer it to the report of the Select Committee we have mentioned, a copy of which, however, we regret we are unable to send to the editor, for the demand all over the world has been such that there are no copies left. It might be well for him to send a member of his staff to the libraries of the Colleges of Surgeons or Physicians in London, to each of which a copy was sent. It might also probably be seen in the Minutes of the Legislative Council for 1887, which, we are informed, are kept for reference at the office of the Agent-General of New South Wales in London.

QUINN VERSUS WATSON.

AT Queanbeyan, an inland town 194 miles from Sydney, a case was lately submitted to the District Court, which amply illustrates some of the evils caused by the apathy of the Government with reference to the bill to regulate medical practice in New South Wales, which had already been approved of by the Upper House of that colony.

The following report of the case is from the local paper:—

His Honor Mr. District Court Judge Fitzhardinge took his seat at 10 a.m. on February 1. QUINN v. WATSON.—This was a jury case, the jurors being Messrs. J. T. Collett, H. F. De Salis, T. S. Hyles, and A. W. Moriarty. It was an action for slander. The plaintiff practises medicine at Captain's Flat, and the defendant is a legally qualified medical man, holding the diploma of M.D., and (besides having a private practice) is medical officer to the Lake George G.M. Company at Captain's Flat. The alleged defamatory words were said to have been used by the defendant against the plaintiff on the occasion of his treatment of a patient who subsequently died. The defence fled was (1) that the statement was not false and malicious, and that the innuendo in the plaint was not warranted by the language used; (2) privilege; (3) justification. Upon the jury being impanelled, his Honor said he strongly recommended the parties to come to a settlement out of court, and if the legal gentlemen having the case in hand (Mr. Millard for plaintiff; Mr. Garraway for defendant) would see their clients and come to some terms of settlement it would be by far the best course to pursue. His Honor allowed the parties to

retire from the court for a short time to consult. After a brief absence, the legal advocates returned into court, and Mr. Millard announced that they had acted upon his Honor's suggestion and were glad to announce that plaintiff unreservedly withdrew his case. The jury were then discharged and the case struck out.

The case not being entered into, no evidence was given. We have, however, been favoured with a copy of the depositions taken at an inquest held at Captain's Flat on 26th October last, which indicate the cause of this vexatious and costly piece of litigation.

Captain's Flat is a copper mining village, twenty-five miles from Queanbeyan. Doctor J. Wallace Watson is the local medical practitioner, but there is also practising in the same place an unqualified person of the name of Roderick Joseph Quinn, who according to the evidence of Senior-constable Canning, "designates himself on a door with the words, Dr. Quinn's Surgery."

Dr. Watson, on Tuesday, 19th October, saw a lad 15 years of age, and treated him for inflammation of the bowels and peritonitis, and deemed the case so serious that on Friday and Saturday (22nd and 23rd) he had consultations with Dr. Blackall, of Queanbeyan, who concurred in the diagnosis and treatment. On Sunday, 24th, at noon, on paying his second visit that day, he found that Quinn had been called in and changed the treatment. He therefore retired from the case, and the child died 24 hours afterwards. We now quote from the sworn evidence of Dr. Watson at the inquest which was subsequently held:—

On going into the room at about 12 noon, my next visit, I found the boy's mother rubbing the child's belly with some liquid contained in a saucer. She told me she had sent for Mr. Quinn, who had given this liniment and instructed her to rub it on the child's belly, and that he would administer medicine every hour. * * * I heard the child died about 24 hours afterwards. I then saw Constable Canning and informed him that, to the best of my belief, the child's death was hastened by the treatment prescribed by Mr. Quinn, for that no man who had the slightest knowledge of medicine, or of that disease from which the child was suffering, would order the child's belly to be rubbed with a liniment, as strict physical rest is one of the most essential features in the treatment of such a case. I thought there was a slender thread of hope for the child's recovery, and considered this was entirely extinguished by the treatment of Mr. Quinn.

Dr. Watson very properly refused a certificate of death, and an inquest was held. The *post-mortem* examination disclosed peritonitis resulting from appendicitis. The verdict of the jury was that the lad "died from peritonitis and inflammation of the bowels, and *that no blame is attachable to anybody.*"

On the strength of this verdict Quinn sued Dr. Watson in the District Court of Quean-

beyan. Drs. Knaggs and Sydney Jamieson, of Sydney, were present at Queanbeyan in order to give expert evidence in the case. By Quinn, the plaintiff, unreservedly withdrawing the case, each party has to pay his own costs; thus Dr. Watson, in consequence of having simply done his duty to his country as a medical gentleman and a loyal subject, has been saddled with a heavy pecuniary loss.

It is not, however, for the protection of the medical profession that we require an Act to regulate medical practice in this colony; it is to protect the lives of Her Majesty's subjects from ignorant pretenders, who can, with impunity, dub themselves "doctors," and thereby mislead people who have no means of distinguishing the qualified from the unqualified practitioner of medicine.

THE NEW SOUTH WALES REGISTER OF MEDICAL PRACTITIONERS FOR 1898.

On January 15, a list of medical practitioners registered under the provisions of the Acts of Parliament was published as a supplement to the *N.S.W. Government Gazette*. The register is published in accordance with the provisions of Section 3 of the Act 2 Victoria, No. 22, and is therefore popularly supposed to be free from error. True, a note at the head of the register states that the "Medical Board have revised the register to the best of their ability, but are aware that it may contain inaccuracies." That it contains inaccuracies is certain, but whether these inaccuracies show careful revision is very doubtful. A few instances will suffice:—No. 1,243 on the register was registered in 1855, yet his earliest qualification is dated 1882. No. 1,858 registered in 1858 (curious coincidence!), his earliest qualification having been obtained in 1891. No. 1,179 registered in 1864 the diploma of L.F.P.S.G.—his only registered qualification—which was obtained in 1880. Dr. Frederick Milford, who has been for so many years in practice in Sydney, is said to have been registered in 1885, although the number of his registration certificate is 464. Then, many names are mis-spelled, *e.g.*, *Faithful*, *McSwinnney*, *Macquire*, etc. Nor do these errors appear for the first time; they have been published for some years past. The Medical Board consists of ten members and a secretary, and surely it is not too much to expect that the official list of legally qualified medical practitioners in New South Wales shall be free from such glaring errors as those we have enumerated above.

HOSPITAL ABUSE.

THE question raised by Dr. Foreman at the meeting of the Directors of the Sydney Hospital, held on 1st February, concerning the abuse of hospital charity by persons able to pay, is a very old one, and has been frequently referred to in our columns. Dr. Foreman's remarks were terse, strong, and to the point.

He said he was speaking at the instance of a member of the staff, who had written to him on the subject, and he went on to say: "Patients were admitted there who had no right to the institution. There were some of the staff present who could bear him out from their own personal experience that patients came who were well able to pay, and in some cases they afterwards did pay. It was not a good thing that those who did so much work should have an injustice done them. The paying system was the curse of the medical world. That institution was practically a vast provident dispensary competing with the men who kept the place going on better terms. It was not right on their part to go and compete with medical men outside. Only in exceptional cases had people who paid a right to admission there. If a person could pay £1 a week no question was asked, and if he could pay £2 a week he was welcomed with open arms. The hospital was built for the indigent sick, and anyone who came there and was ready to pay £2 or £1 a week was robbing someone outside who had a right to a bed. The out-patient department was also very grossly abused."

After citing two cases, he moved that a sub-committee be appointed to investigate, but the resolution was lost. (For fuller report see page 86.)

The same abuses of which Dr. Foreman complains occur in other hospitals throughout Australasia, and we invite correspondence giving instances of abuses and suggesting remedies.

AS OTHERS SEE US.

IRREGULAR MEDICAL PRACTICE IN AUSTRALIA.
It is quite certain that legislative interference is required in order to deal with the wholesale irregular medical practice which obtains in New South Wales. In the November issue of our contemporary, *The Australasian Medical Gazette*, the editor exposes in unmitigated terms the gross evils which prevail in this respect. Medical men, even in this country, are driven to complain of the evils of irregular practice. But the laws of the land protect them to a great extent, and the honour and dignity of the profession is more or less jealously guarded. On the other hand how would an English medical man like to practice in a country where no such laws are in force, such as is the case in New South Wales? "The absence of any law," says our contemporary, "which regulates the practice of medicine in that colony, enables unscrupulous persons to freely advertise in all the newspapers in terms which are not merely grossly mis-leading, but absolutely false." Some sensational instances are given of the scandalous means by which the public are induced, by advertisements in the lay press, to patronise the irregular practitioners. In one case, a man, by trade a compositor, has so built up a practice that he has boasted his profits amount to some thousands of pounds

a year. In his advertisements, moreover, he coolly claims that he stands at the head of his profession. Another case is that of a man whose past history shows him to have been a repeatedly-convicted criminal. The only step which appears to us should be taken by our confrères in New South Wales is to call a meeting of the whole profession, and by such means draw public attention to the scandal. It would then be easy to frame certain resolutions dealing with the matter, with a view to submitting them to the Government. In any case some further active policy by the profession seems urgently demanded in order to deal with the scandalous state of affairs to which our contemporary so impressively refers.—(From the *Medical Press and Circular*, January 5th, 1898.)

PUBLIC HEALTH

THE excessive heat experienced early in January had the effect of greatly increasing the number of infectious diseases reported throughout Victoria. During the fortnight ending January 22, 204 cases of typhoid fever were reported, 24 being fatal; and 60 cases of diphtheria, four proving fatal. The figures in both instances show a considerable increase on the corresponding period last year.

A chemical analysis was made recently by the Government Analyst of the artesian water which supplements the water supply of Perth, W.A. He declared that, owing to the presence of a large quantity of ammonia, the water is unfit for human consumption without boiling.

Scarlet fever is very prevalent in New South Wales.

In connection with the recent inquiry by the Victorian Customs Department into the sale of alleged decoctions of chemical acid and water as "Parramatta limejuice," the Department has decided to take proceedings under the Health Act in two specific cases. In each instance, it is alleged, the liquid sold as genuine limejuice was composed of dissolved tartaric acid.

Smallpox has appeared on the mail steamer "Caledonien," which arrived at Australian ports in the early part of the month. The passengers and crew have been quarantined.

The Melbourne *Argus*, of January 20, says:—"Medical practitioners are not satisfied with the fees they receive from the Government for reporting infectious diseases. The Medical Defence Association had the matter brought before the Board of Public Health at its meeting yesterday, when it transpired that the fee for reporting cases was 1s., which was regarded as altogether ridiculous. The Board was disposed to agree with the Association, and consented to receive a deputation from that body on the subject. The secretary was asked to write to the other colonies to ascertain the practice there."

Dr. Charles Parker, Launceston, Tas., was charged at the local Police Court on Friday, 22nd ult., with failing to report a case of typhoid fever. He pleaded guilty, stating it was an oversight, and the Magistrate inflicted a nominal penalty of £2 and costs.

Influenza of a severe type is very prevalent along the north-west coast of Tasmania, and several deaths have been reported.

AUSTRALIAN PROGRESSIVE SONGSTER.

Messrs. Angus & Robertson have forwarded us a copy of Nos. 1 and 2 of Dr. M'Burney's "Australian Progressive Songster." These publications are compiled in a simple musical form, so much so that the principles embodied may be readily grasped by a child.

VITAL STATISTICS.

SYDNEY.—The Registrar-General's report on the vital statistics of Sydney and suburbs for December states that there were 929 births recorded in Sydney and suburbs during December, viz., 473 of males and 456 of females, which is 383 in excess of the deaths, but falls short of the average number of births for December in the previous five years by 61. The deaths numbered 546, viz., 307 of males and 239 of females, which is 5 below the quinquennial average of the month. 147 deaths (89 males, 58 females), or 26·72 per cent. of the total, occurred in public institutions. According to the classification of the causes of death, local diseases, with a total of 274 deaths, occasioned 50·18 per cent. of the mortality of the month, and the most prominent in this class were—inflammation of the brain, 8; apoplexy, 8; paralysis and diseases of the spinal chord, 9; general paralysis of insane, 5; epilepsy, 6; convulsions, 8; heart disease, 28; bronchitis, 13; pneumonia, 21; enteritis, 75; peritonitis, 6; cirrhosis and other diseases of the liver, 12; and Bright's disease, 17. Constitutional diseases came next with 87 deaths (15·94 per cent.), the principal being—cancer, 28; phthisis, 31; and tabes mesenterica, 9. There were 31 violent deaths (24 males, 7 females). The number of births to every 1,000 of the population was 2·27, and of deaths 1·33. Typhoid fever has been more prevalent than for some time past, the fatal cases last month numbering 18. As is usual during the summer months, there has been an increase in the number of deaths of young children, whose ailments at this time of the year are chiefly diarrhoea and gastro-enteritis. The births for the quarter ending December 31 numbered 2,833 (1,455 males, 1,378 females); and the deaths 1,442 (798 males, 644 females), which are respectively 157 less births and 91 more deaths than were registered during the last quarter of 1896.

ADELAIDE.—During the month of November there were registered in the city of Adelaide 89 births and 76 deaths. Twenty of the deaths were under 1 year of age. There were 5 from cancer, 3 from phthisis, 6 from pneumonia. There were 766 births and 367 deaths in the colony of South Australia, exclusive of the Northern Territory.

NEW ZEALAND.—The proportion of deaths registered during December to every 1,000 of the population was 1·21 for Auckland and suburbs, 0·86 for Wellington with suburbs, 0·97 for Christchurch and suburbs, and 0·68 for Dunedin and suburbs. The total births in these four boroughs amounted to 377. The deaths were 161, to which males contributed 74, and females 87. Thirty-six of the deaths were of children under five years of age; 28 of these were under one year of age. There were 11 deaths from cancer, 18 from phthisis, 9 from pneumonia.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the month of December 105 births—59 males and 46 females—were registered in the registration districts of Hobart and Launceston. To every 1,000 of the population of the two districts the proportions of births registered were as follow:—For Hobart, 1·37; for Launceston, 2·09; all, 1·65. Deaths.—The deaths registered in November, in Hobart and Launceston, numbered 85—49 males and 36 females; 38 deaths, or 43·18 per cent. of the whole, took place in public institutions. To every 1,000 of the population of the respective divisions the proportions of deaths registered were as follow:—Hobart, 1·57; Launceston, 1·09; all, 1·38. The deaths under five years of age numbered 30, or 34·09 per cent., of which 23 were under one year of age.

During the month of December last there were 61 deaths registered in the registration district of Hobart, being an increase of 7 as compared with the corresponding month of 1896. Four of the deaths were of persons not usually resident in the district. In the city proper there were 42 deaths, giving an annual death-rate equal to 17·4 per 1,000. The principal causes of death were: Diphtheria, 1; typhoid, 4; diarrhoea, 3; phthisis, 3; convulsions, 2; aneurism, 2; bronchitis, 2; pneumonia, 2; enteritis, 5; other intestinal diseases, 3; atrophy, 5; burns, 1; and the remainder were of a general nature. The mortality from intestinal diseases amongst children under one year of age principally due to the exceptionally warm weather during the month is the chief cause of the high death-rate. Of the deaths 17 were of persons under one year of age.

BRISBANE.—During the month of November there were registered in Brisbane 164 births and 87 deaths. The principal causes of death were: Typhoid fever, 1; cancer, 6; tabes mesenterica, 4; phthisis, 6; pneumonia, 10; enteritis, 11. During December there were 153 births and 72 deaths. There were 2 deaths from typhoid fever, 1 from dengue fever, 1 from diphtheria, 4 from cancer, 5 from phthisis, 6 from pneumonia, 8 from enteritis.

GOVERNOR'S REGULATIONS UNDER "PUBLIC HEALTH ACT OF N.S.W., 1896."

PART III.

1. The form of certificate for notification of cases of infectious disease shall be the form in Schedule A.
2. Medical officers to public institutions shall, in addition to giving the address at which the case is, give the address whence it was removed.
3. The Local Authority, on receiving a notification certificate signed by a legally qualified medical practitioner, after ascertaining that the house referred to in it is within the district of the said Local Authority, shall copy the certificate in the prescribed register, and shall then transmit it by the first post to the Secretary to the Board of Health.
4. If the certificate has been received by the wrong Local Authority it shall be forthwith sent by the said Local Authority to the Local Authority within whose district the house named in it is situated.
5. Legally qualified medical practitioners shall prepare their claims for fees in the usual official voucher forms, and shall state therein the name of the district in respect of which each claim is made, the date of report, and the patient's name, and shall forward such vouchers to the Secretary to the Board of Health at the close of each month.
6. The form of register to be kept by the Local Authority for a Municipal District shall be the form in Schedule B.
7. The form of register to be kept by the Local Authority for a Police District shall be the form in Schedule C.
8. When the case of infectious disease notified is that of a person of school age, the Local Authority shall forthwith notify the head teacher of the school usually attended by such person, in the form in Schedule D.
9. The Local Authority shall deliver at every premises on which the presence of a case of infectious disease has been notified, the notice ordered to be given in section 26 of the Act in the form in Schedule E.
10. The form in which Registrars of Deaths shall notify the Board of Health that they have registered a death ascribed to an infectious disease shall be the form in Schedule F.

11. The owner or occupier of infected premises on whom notice has been served by a Local Authority to cleanse and disinfect the same or part thereof, and to disinfect or destroy infected articles thereon, who has informed the Local Authority that he will carry out the said cleansing and disinfecting himself, shall, if he fails to complete it to the satisfaction of a legally qualified medical practitioner, as certified by the latter to the Local Authority in writing, within the time named in the said notice, be liable to a penalty not exceeding (£20) twenty pounds.

12. The body of every person who has died of an infectious disease shall be wrapped as soon as may be after death in a wrapper so as to envelop it completely, which wrapper shall be wet with a solution made by mixing five parts of carbolic acid with ninety-five parts of water.

13. Every such body shall be confined, and the lid of the coffin shall be permanently fastened down, within twenty-four hours after death.

14. The joints of the lower part of every coffin used to contain the body of a person who has died of an infectious disease shall be watertight.

15. Any person wilfully offending against any of the three last preceding regulations shall be liable to a penalty not exceeding (£5) five pounds.

SCHEDULE A.

The Medical Practitioner attending or called in to visit must send this Certificate, duly filled and signed, to the Local Authority for the District within which the patient is ill, forthwith on becoming aware that the disease is one which has been declared to be an infectious disease under section 20 of the Public Health Act, under a penalty for neglect not exceeding five pounds.

I hereby certify that in my opinion _____, aged _____ sex _____, an inmate of _____, in the District of _____ is suffering from _____
Date _____ Signed _____

Legally Qualified Medical Practitioner.

* * The following must be filled by Medical Officers of Public Institutions, and should also be filled by others whenever the place where the patient is clearly is not the place at which the illness was contracted :—

I am of opinion that the date of attack was _____, and at that time the patient was living at _____

The following Additional Information is desired.

The patient attends school at _____ I have been informed that the milk consumed by the patient shortly before attack was supplied by _____

Any matter on or near the premises, probably connected with the occurrence of illness, which requires attention :—

For use of the Local Authority.

The house mentioned stands in the District of [If the district is correctly assigned repeat here, if incorrect make no entry, but transmit the Certificate by post to the proper Local Authority at once.]

Received [Date] _____

(Signed) _____

Local Authority.

NOTICE.—This Certificate, having been received by the proper Local Authority and the particulars entered in the prescribed register, is to be forwarded forthwith to the Secretary, Board of Health, Sydney.

SCHEDULE B.

The Form of Register to be kept by the Local Authority for a Municipal District shall be the following :—

Date of Report.	Date of receipt of Report.	Name of Legally Qualified Medical Practitioner reporting.	Patient's Name.	Sex.	Age.	Address of premises at which patient is.	Ward of Municipality.	Disease.	Milk Supply.	School.	(1) Residence at date of attack.	(2) Sanitary Inspector visited and served notices.	(3) If a separate night-soil service provided?	(3) If articles removed and disinfected by L.A.?	(4) Premises disinfected.	Any special matter requiring attention.

(1) If different from address at which patient is.

(2) Date.

(3) Yes or no.

(4) Enter date in the proper column.

SCHEDULE C.

The Form of Register to be kept by the Local Authority for a Police District shall be the following :—

Date of Report.	Date of receipt of Report.	Name of Legally Qualified Medical Practitioner notifying.	Patient's Name.	Sex.	Age.	Address of Premises at which patient is.	Disease.	Notices delivered or posted (1).	Schoolmaster warned (1).

(1) Date

**SCHEDULE D.
INFECTIOUS DISEASES—NOTIFICATION AND
PREVENTION.**

(60 Vic. No. 38, Part III.)

To the Head Teacher of _____ School.
The child ⁽¹⁾ _____, sex _____, age _____,
having been notified to the Local Authority for the
District of _____ as being ill at ⁽²⁾ _____
of the infectious disease ⁽³⁾ _____ neither the
patient nor any other child living on the same premises
should be admitted to your school until the provisions
of section 28 of the "Public Health Act, 1896," have
been complied with.

Date _____

Sanitary Inspector.

- (1) Full name.
(2) Full address.
(3) Name of infectious disease

Section 28. Any person who knowingly or negligently sends to school a child, who within the previous two months has been suffering from an infectious disease, or who has been resident in any house in which such disease has existed within the space of six weeks, without furnishing the head teacher of the school with a certificate from a legally qualified medical practitioner that such child is free from disease and infection, and causing the clothes of such child to be disinfected to the satisfaction of a legally qualified medical practitioner, shall be liable to a penalty not exceeding ten pounds.

**SCHEDULE E.
LOCAL AUTHORITY FOR THE DISTRICT OF**
(60 Vic. No. 38, Part III.)

In accordance with the provisions of section 26 (III) of the Public Health Act of 1896, your attention is specially directed to the subjoined copy of the said section 26.

To _____ (Signed) _____
Date of Service _____ Sanitary Inspector.

26. (I) Where a person ceases to occupy any house or part of a house in which any person has, within six weeks previously, during his occupancy, been suffering from any infectious disease, and either—

- (a) Fails to have such house or part of a house and all articles therein liable to retain infection disinfected to the satisfaction of a legally qualified medical practitioner, as testified by a certificate signed by him, or such articles destroyed; or
- (b) Fails to give the owner or occupier of such house or part of a house notice of the previous existence of such disease, he shall be liable to a penalty not exceeding five pounds.

(II) And if, on being questioned by the owner or occupier of, or by any person negotiating for the hire of such house or part of a house, as to the fact of there having within six weeks previously during his occupancy been therein any person suffering from any infectious disease, he knowingly makes a false answer to such question, he shall be liable to a penalty not exceeding ten pounds.

(III) The local authority shall cause their officers to serve notice of the provisions of this section on the occupier of any house or part of a house in which they are aware that there is a person suffering from an infectious disease.

27. Any person letting for hire, or showing for the purpose of letting for hire, any house or part of a house in which or in part of which within his knowledge there has been within the previous six weeks a

person suffering from an infectious disease (whether the said house or part of a house has or has not been disinfected) who fails to state that fact to the person negotiating for the hire of the house, or part of a house, or being shown over the house, or part of a house, for the above purpose, shall be liable to a penalty not exceeding twenty pounds.

28. Any person who knowingly or negligently sends to school a child who, within the previous two months, has been suffering from an infectious disease, or who has been resident in any house in which such disease has existed within the space of six weeks, without furnishing the head teacher of the school with a certificate from a legally qualified medical practitioner that such child is free from disease and infection, and causing the clothes of such child to be disinfected to the satisfaction of a legally qualified medical practitioner, shall be liable to a penalty not exceeding ten pounds.

30. Any person who—

- (a) While suffering from any infectious disease exposes himself without proper precautions against spreading the said disease in any street or public place, shop, inn, theatre, church, chapel, or place of public resort, or any public conveyance, or any vehicle or vessel hired or plying for hire, or enters any public conveyance, vehicle or vessel aforesaid without previously notifying to the owner, conductor, driver, or master, or, in the case of conveyance by railway, the stationmaster, that he is so suffering, and obtaining his consent to ride or be carried in the said conveyance, vehicle, or vessel; or
- (b) Being in charge of any person so suffering so expose such sufferer; or
- (c) Gives, lends, sells, transmits, removes, or exposes without previous disinfection, any bedding, clothing, rags, or other things which have been exposed to infection from any such disease, shall be liable to a penalty not exceeding five pounds, unless such person satisfy the Court that he was ignorant of the existence of such disease: Provided that no proceedings under this section shall be taken against persons transmitting or removing with proper precautions any bedding, clothing, rags, or other things, for the purpose of having the same disinfected or destroyed.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

THE SYDNEY HOSPITAL.

ABUSE OF THE CHARITY.

A MEETING of the Board of Directors of the Sydney Hospital was held on February 1. The President (Sir A. Kenwick, M.L.C.) occupied the chair, there being also present upwards of 20 members of the Board.

Dr. FOREMAN had announced his intention of calling the attention of the Board to the "abuse of the charity." He now said that this was really an urgent matter. He had received a letter from a member of the staff, who was only one of a number who had spoken on the subject. Patients were admitted there who had no right to the institution. There were some of the staff present who could bear him out from their own personal experience that patients came who were well able to pay, and in some cases they afterwards did pay. It was not a good thing that those who did so much work should have an injustice done them. In

one instance a man living at an hotel met with an accident and was admitted. That was all right. All accidents ought to be admitted without question, and none of the staff objected to that; but when that man went out and subsequently was treated in the out-patient department it was carrying the thing too far. He knew a place where a man was admitted, but for a proper reason was not operated upon there, and he afterwards offered 100 guineas to go to a private hospital. The paying system was the curse of the medical world. That institution was practically a vast provident dispensary competing with the men who kept the place going on better terms. It was not right on their part to go and compete with medical men outside. Only in exceptional cases had people who paid a right to admission there. If a person could pay £1 a week no question was asked, and if he could pay £2 a week he was welcomed with open arms. The hospital was built for the indigent sick, and anyone who came there and was ready to pay £2 or £1 a week was robbing someone outside who had a right to a bed. The out-patient department was also very grossly abused. It was rather a big question to go into. He would suggest that a sub-committee should be formed to inquire into it, to see who was in fault, and to draw up suggestions for the proper guidance of those who had to look after it in future; or he was quite willing to let the matter come before the house committee.

The PRESIDENT said that the house committee had quite sufficient work without undertaking this subject. If it was to be gone into it should be dealt with by the Board. There was no doubt about the importance of it, but the difficulty was to deal with it.

Dr. FOREMAN moved,—"That a sub-committee of the Board be appointed to deal with the question of the admission of patients to the hospital, and also of those who are admitted to the outdoor department."

Dr. GRAHAM said that the question had been inquired into both by the Prince Alfred Hospital and the Sydney Hospital, and, while it had been found that isolated cases of abuse had taken place, the great majority which were supposed to be instances of abuse turned out on investigation to be cases of respectable poverty. Their experience in connection with the admission of patients and the class of patients admitted was exactly similar to that of the authorities in European hospitals, where the question had long been a burning one, and where it seemed as far from being settled as ever. At present medical journals were full of discussion as to the class of patients who should get the benefit of hospital charities; but, as he had indicated, no true solution had yet been found. The great bulk of the patients at the Sydney Hospital were sent by the medical men. He made a suggestion some time ago that there might perhaps be a conference on the subject. When patients were admitted to the Sydney Hospital they were asked how much they could pay and what they received a week.

Dr. JENKINS said that a large number of cases came from the country people, and they could know nothing about them.

The PRESIDENT said that he could see difficulties in every direction. They charged a nominal sum of a shilling to a person in poor circumstances who could pay it on coming for outdoor relief.

The Hon. Dr. MACKELLAR said that the matter was investigated years ago. It was found that they treated as paupers persons who had thousands of pounds. He thought that a conference might be productive of much good. In his opinion it was unjust and degrading to the hospital to ask a poor person for a shilling.

Eventually a show of hands was taken, and the motion was lost.

REGULATIONS RELATING TO ADMISSION OF PROBATIONERS.

Attention was drawn to a letter written by Sir George Dibbs relative to a desire on his part that a certain young lady should be appointed a probationer. In it Sir George said that after being asked a host of questions she was informed by the matron that she might hear from her in about two years. Considering what he had done for the hospital, he thought that to treat the only recommendation he had made in that very ungenerous manner was, to say the least of it, an insult that he should never forget.

Discussion ensued, in which it was stated that the answer given in this case was almost invariably the one rendered, being that of a straightforward and capable woman able to manage her department, and to do so, as she did, with the utmost impartiality. Sir George Dibbs had no more right to send anybody to the hospital than any of the rest of them.

The PRESIDENT said it seemed that Sir George Dibbs came to the institution with the young lady and asked that she should be put forthwith on the hospital staff. The matron said that there was a rule that persons, whoever recommended them, must take their turn. Sir George Dibbs objected to it, and brought the subject before the house committee. He (the President) explained it to the committee. The committee, knowing that there were ladies on the list who were recommended by persons who had served the hospital for 20 or 30 years, and who were not taken out of their order, asked him to write a letter to Sir George Dibbs on the subject. He thought the matter was settled, but it seemed that Sir George was still offended, and, he thought, without reason. They acknowledged that Sir George had rendered great services, but there were also others who had done so.

NEW MEDICAL SUPERINTENDENT.

The PRESIDENT introduced the new Medical Superintendent, Dr. M'Lelland, and referred to a letter written to the late Medical Superintendent, Dr. Binney, in which allusion was made to the satisfactory manner in which he had discharged his duties, and a hope was expressed for his future success.

Notice of motion had been given in reference to the appointment of an additional aural senior surgeon, but it was withdrawn, as it had been unanimously resolved that the Honorary Medical Staff should not recommend any further change in the staff of the ear, throat, and nose department.

It was agreed that tenders should be invited for carrying out necessary work in relation to the operating theatre.

There were two candidates for the position of a senior resident medical officer, the choice falling on Dr. L. H. L. Harris.

Dr. J. L. T. Isbister was elected a pathological assistant.

The Board adopted a recommendation from the house committee that all future appointments of resident medical officers should date from March 1.

NEWCASTLE HOSPITAL, N.S.W.

ANNUAL MEETING.

The annual report of the general committee states that the buildings and grounds of the institution had been maintained in good order, and the medical and nursing staffs had carried out their duties in a highly satisfactory and efficient manner. Reference was made to the urgent necessity for several additions to the buildings, including a new operating theatre complete with the latest improvements and furnished with the

most modern instruments, a casualty reception-room, a consulting-room for the medical staff, a special ward for abdominal surgery, and increased accommodation for the nursing staff. The repeated applications to the Government to place this institution on a similar footing to that which obtains at the Sydney and Prince Alfred hospitals with respect to receiving from the Government pecuniary consideration for the treatment of indigent patients who, not having any claim on the district, should only be received by order of the Government as distinct from those receiving gratuitous treatment on the recommendations of subscribers had met with no response. The system of the administration of the out-door department had engaged attention for some time past, and to obviate imposition it was proposed that the secretary be appointed to take up the duties of registrar in conjunction with his other duties. An application had been made to the Government for a special grant of £1,000, but only half this amount had been voted. The income of the past year amounted to £2,532 8s. 6d., contributed from the following sources:—Subscriptions and donations, £957 6s. 10d.; fees of patients, £872 14s. 3d.; Government subsidy, £673 6s. 3d.; interest on permanent deposit, £6 15s. 9d.; and miscellaneous receipts, £22 0s. 6d. The expenditure totalled £2,557 16s. 5d.

The medical report submitted by Dr. Dunlop (Medical Superintendent) gave the following particulars relative to the work of the past year:—Number of patients in hospital January 1, 1897, 36; admitted during the year, 765—total, 801; discharged cured, 522; discharged relieved, 126; discharged unrelieved, 37; died, 70; remaining in hospital, December 31, 1897, 46—total, 801; out-patients' attendances, 2,589. Total "in" and "out" patients treated, 3,390. Of the 801 inmates treated, 284 were paying patients, and no less than 517 were free.

Dr. HESTER called attention to the fact that the nursing staff was far too small, and stated that the nurses were required to work much harder than those in the metropolitan institutions. In support of his contention he submitted the following figures:—Prince Alfred Hospital, 239 beds, 66 nurses; Sydney Hospital, 250 beds, 68 nurses; Newcastle Hospital, 66 beds, 12 nurses.

Dr. DOYLE referred to the astonishing increase of outdoor patients, pointing out that within a few years the number had quadrupled. In 1887 the number of cases treated was 510, whilst in 1897 no less than 2,500 persons had been attended to. The matter required investigation.

After the transaction of some formal business the proceedings were brought to a close.

North Sydney Hospital.—Dr. B. J. Newmarch has accepted the position of Honorary Secretary to the Hospital.

Launceston Hospital.—The Hospital Board decided at their last meeting to alter the rules to enable the Board to appoint more than three hon. medical officers. The Chairman pointed out that three were not enough. The resignation of Surgeon-Superintendent Dr. Drake, who intends to start practice in Hobart, was accepted with regret, and the House Surgeon (Dr. Ramsay) was promoted to the position of Surgeon-Superintendent at a salary of £350 a year. It was agreed to advertise for another house surgeon. A special meeting was afterwards held to consider a petition signed by eight Launceston medical men asking that in

view of an approaching change in the medical staff at the hospital an honorary staff of six medical officers should be appointed on lines similar to those prevailing in all hospitals in large centres of population. After discussion it was agreed to remit the petition to a committee for consideration and report. The income from fees for the past year was £1,009 9s. 9d., as compared with £648 16s. 1d. for the previous year.

Mudgee Hospital, N.S.W.—Dr. Nickoll has been re-elected Medical Officer.

Randwick Asylum, N.S.W.—At the last meeting of the directors of the Society for the Relief of Destitute Children, Randwick, the medical staff of the asylum was re-elected, viz.: Dr. T. Storie Dixon, Hon. Consulting Physician; Dr. Thomas Evans, Hon. Consulting Surgeon; Dr. J. Adam Dick, Hon. Visiting Medical Officer.

UNIVERSITY OF SYDNEY.

The monthly meeting of the Senate for February was held on the 7th inst., at Selborne Chambers, Phillip-street. The Chancellor (the Hon. Dr. MacLaurin) presided.

M.B. GRADUATES.

The degree of Bachelor of Medicine (M.B.) was conferred upon the following:—Ada Affleck, Harriett E. Biffin, Gustav H. Bohrmann, Cedric V. Bowker, Percy G. Cooley, Hubert R. Cope, Robert Dey Laurence, E. Ellis, Edwin C. Hall, Norman W. Kater, Thomas W. Lipscomb, John Macpherson, M.A., B.Sc., John J. O'Keefe, Robert H. Pulleine, William H. Read, Herbert Sheldon, Harold S. Stacy, William W. Stevens, and Herbert Z. Throsby.

An application from Dr. Sydney Jones for 12 months' leave of absence from the meetings of the Senate, in consequence of his proposed absence from the colony for that period, was granted.

A letter was received from the President of the Australasian Association for the Advancement of Science, tendering the thanks of the association for the use of the hall and buildings for its seventh session. A letter was received from Dr. Elliott Smith in reference to the work done by him during his tenure of the James King of Irrawang Travelling Scholarship. A letter was received from the General Medical Council, London, conveying the following resolution:—"That the council intimate to all examining bodies whose examinations in general education are recognised by the Medical Council as qualifying for the registration of medical students that on and after the 1st day of January, 1899, no certificate of lower standard than that of the matriculation or entrance and the junior local examinations of the Universities of the United Kingdom will be accepted for registration." It was decided that no action was necessary in view of the fact that the standard for medical entrance in Sydney is much higher than the standard of examinations referred to in the resolution of the General Medical Council.

DEMONSTRATOR IN PHYSIOLOGY.

A letter was received from Professor Anderson Stuart reporting the appointment of Mr. Herbert Hawker, late Demonstrator in Physiology in University College, London, as Demonstrator of Physiology at the University of Sydney in succession to Dr. Tidswell. The appointment was confirmed.

SYDNEY UNIVERSITY AND PRINCE ALFRED HOSPITAL.

THE CONJOINT BOARD.

At a meeting of the conjoint board, consisting of the Senate of the University and the directors of the Prince Alfred Hospital, held at Selborne Chambers, Phillip-street, on Monday, the Chancellor of the University (Dr. MacLaurin) presiding, the following appointments were made for the Prince Alfred Hospital:—Dr. G. T. Hankins, to be Honorary Consulting Surgeon; Mr. S. H. Hughes, F.R.C.S. Eng., to be Honorary Assistant Ophthalmic Surgeon; Messrs. J. MacPherson, M.A., B.Sc., M.B., R. H. Pullienc, M.B., N. W. Kater, M.B., L. E. Ellis, M.B., E. C. Hall, M.B., and T. W. Lipscomb, M.B., to be Resident Medical Officers to the 1st of February, 1899; Mr. E. M. Pain, M.B., Ch.M., to be Registrar and Anæsthetist for the year ending March 1, 1899.

MEDICAL NOTES.

Presentations to Medical Men.—Dr. E. H. Binney, who has for several years held the position of Medical Superintendent of the Sydney Hospital, and who has been succeeded by Dr. W. C. McClelland, has been entertained at the hospital. Members of the medical staff, employees, and friends were present. Musical items were rendered by Mrs. Maguire, Zlotkowski, Messrs. H. Weir, F. Barron, Morley, and S. H. Harris. The retiring superintendent was presented by Dr. McClelland, on behalf of the resident medical staff and male employees, with an oak roller-top desk and with a handsome onyx clock, the gift of the matron and nursing staff.

An honorarium of £25 has been presented to Dr. J. Adam Dick, the Honorary Visiting Medical Officer of the Randwick Asylum, by the directors of the Society for the Relief of Destitute Children, Randwick, N.S.W.

Dr. Finch Noyes met with a serious accident while practising at the Melbourne Polo Club on January 29.

According to the Vienna correspondent of the London *Daily Chronicle*, Dr. Scheneck, Professor at the University of Vienna and President of the Embryological Institute, claims that after 20 years of experiments he has discovered the secret of exercising an influence over animals and men so as to fix the sex of their offspring.

MILITARY INTELLIGENCE.

Victoria Forces.—His Excellency the Governor of Victoria has been pleased to approve of the following appointments:—Reserve of Officers, Medical Staff, Militia—Charles Louis Lempriere, M.B. and C.M. Edin., of South Yarra, and Douglas Andrew Shiels, M.D. Edin., of Ballarat, to be Surgeons-Captain on probation. Medical Staff, Victorian Mounted Rifles—Lieutenant H. W. Salmon, from the Victorian Mounted Rifles, to be Surgeon-Captain.

Queensland Forces.—His Excellency the Governor of Queensland has been pleased to approve of the appointment of Surgeon-Captain Arthur Vores to be a Surgeon-Major in the Queensland Defence Force (land).

OBITUARY.

JAMES O'CONNELL, L.R.C.P. and S. Edin., 1877, who practised at Adelaide for nearly 18 years, was accidentally drowned at Goolwa, S.A., on January 13. Dr. O'Connell was for many years a member of the Hospital Board.

JOHN JAMES THOM, M.D. Edin. 1860, who for about 27 years had been practising at Eaglehawk, Vic., died rather suddenly on January 20, as a result of an apoplectic seizure. Deceased was a native of Edinburgh, about 65 years of age, and was unmarried.

MEDICO-LEGAL.

THE CASE OF DR. E. J. GURDON, OF BRIGHTON, VIC.—On Tuesday, January 11, a meeting of the medical profession was held at the Vienna Cafe, Melbourne, when Dr. John Williams, who presided, presented Dr. E. J. Gurdon, of Brighton, with the sum of £101 10s., which had been subscribed by the profession, as an expression of sympathy with him in the action-at-law to which he was recently subjected. Dr. Gurdon's health having been drunk, he feelingly expressed his grateful appreciation of the practical sympathy extended to him by his professional brethren.

A QUESTION OF MEDICAL FEES IN SYDNEY.

LYDEN V. GREER.

Mr. E. H. Gardner was for the plaintiff, and the defendant appeared in person. The plaintiff, Dr. Lyden, a duly qualified medical practitioner, residing in College Street, claimed from the defendant, J. J. Greer, who lives at Surrey Hills, £11 0s. 6d. for medical attendance on his wife during her accouchement. The defendant contended that the plaintiff was not entitled to more than £2 2s., being the medical officer of the lodge to which he belonged. Plaintiff produced a copy of the by-laws of the lodge, indicating that exceptions in regard to charges for medical attendance were made in relation to accouchements, &c. He stated that he was summoned to attend Mrs. Greer in October last, and paid 21 visits, for which he charged the minimum fee fixed by the lodge. His Honor gave a verdict for the amount claimed, *with costs*.

[Dr. Lyden wishes to correct the report of the above case as given in the *Sydney Morning Herald* of the 9th inst. Dr. Lyden was called upon to attend the patient without the usual notice. The fee charged was not the minimum fee fixed by the lodge, but, rather, the minimum fee, as a concession to the defendant in consideration of his membership of the lodge.—Ed. A.M.G.]

CHANGE OF ADDRESS, &c.

COOPER, Dr. H. W., late of West Wyalong, has gone to Carcoar, N.S.W.

DALTON, Dr. M. C., has removed from Newcastle to Burtowa, N.S.W.

GOODALL, Dr. C. E., has returned to Melbourne per R.M.S. "China," from his trip to England.

HISLOP, Dr. W., has removed from Petone to Palmerston, Otago, N.Z.

JOHNSTON, Dr. A. A., late of Clifton Hill, Vic., has commenced practice at Penola, S.A.

KIERNANDER, Dr. H. B., late of Broken Hill, N.S.W., has started practice at Waratah, Tas.

MACKAY, Dr. W., has commenced practice at Millthorpe, N.S.W., in conjunction with Dr. Griffiths, of Blayney.

MARKS, Dr. E. J. K., late of Aramac, Q., has succeeded to the practice of Dr. MacDonnell, at Herberston, Q.

MCMASTER, Dr. J., has succeeded to Dr. A. J. O'Flanagan's practice at Merriwa, N.S.W.

NAYLOR, Dr. H. G., of Hobart, Tas., has sold his practice to Dr. Allsopp, of Hawthorn, Vic.

PALMER, Dr. A. E. A., has removed from Greytown to Featherston, N.Z.

PULLIN, Dr. F. B., formerly of Townsville, and late of S.A. and W.A., has removed to Montalbion, North Queensland, having been appointed Surgeon of the Walsh District Hospital.

SIEDEBERG, Dr. E., has commenced practice at Dunedin, N.Z.

STEWART, Dr. A., late of Montalbion, Q., has left for England per the R.M.S. "Jumna."

SYMES, Dr. R. H., has succeeded to Dr. Hunt's practice at Hughenden, Q.

TERREY, Dr. H., late of the Sydney Hospital, has joined his brother, Dr. C. Terrey, at Kiama, N.S.W.

MEDICAL APPOINTMENTS.

The following medical appointments are announced:—
Anderson, T. L., M.B. Ch.B. Melb., late House Surgeon, Melbourne Hospital, to be Resident Medical Officer to the Fremantle Hospital, W.A.
Cooper, H. W., M.D. Balt., to be Resident Medical Officer at Carcoar Hospital, N.S.W.
Cox, J. W., M.B., C.M. Edin., to be Government Medical Officer and Vaccinator for the district of Nymagee, *vice* Dr. H. R. H. Peare, who has left the district.
Flashman, J. F., M.D., Ch.M. Syd., to be Junior Medical Officer at the Hospital for the Insane, Callan Park, N.S.W.
Hislop, Walter, B.M., B.S. Univ. N.Z., to be a Public Vaccinator for the districts of Warkonaiti and Palmerston, N.Z.
Hunt, J. S., M.R.C.S. Eng., L.R.C.P. Edin., to be manager of the Stook Department of Queensland.
Kiernander, H. B., L.R.C.S. and P. Edin., &c., to be Surgeon to Emu Bay Railway Co., Tas.
Mason, James, L.R.C.P. Edin., to be a Public Vaccinator for the district of Otaki, N.Z.
Maddox, W. G., M.R.C.S. Eng., to be an Honorary Medical Officer of the Launceston Hospital, Tas.
McKenna, J., M.D., &c., to be Public Vaccinator at Shepparton, Vic., *vice* Dr. J. W. Harbison, resigned.
Millard, E. J., M.B. Ch.M. Syd., to be Senior Medical Officer, Hospital for the Insane, Kenmore, N.S.W.
Nisbet, W. B., M.B., &c., to be Acting Health and Medical Officer at Townsville, Q.
Pardey, J. M., M.B. Ch.B. Melb., to be an Honorary Medical Officer of the Launceston Hospital, Tas.
Pike, C. J., M.B., Lond., M.R.C.S. Eng., to be an Honorary Medical Officer of the Launceston Hospital, Tas.
Pitcher, S. W., L.R.C.P., &c., as Officer of Health for the Shire of Creswick, Vic., *vice* Dr. W. Corry, resigned.
Poggioni, V., M.D., M.Ch. Univ. Bologna, to be Government Medical Officer and Vaccinator for district of Barraba, N.S.W., *vice* Dr. J. W. Hart, resigned.
Pullin, F. B., L.F.P.S. Glas., &c., to be Surgeon of the Walsh District Hospital, Montalbion, Q.
Ramsay, Charles, M.B., Ch.B. Melb., to be Surgeon Superintendent of Launceston Hospital, Tas., *vice* Dr. Drake, resigned.
Robinson, R. A., M.D., L.R.C.P. and S. Edin., to be Government Medical Officer and Vaccinator for district of Coolamon, N.S.W.
Stook, W. H., L.F.P.S.G., &c., to be Acting Public Vaccinator at Clifton Hill, Vic.
Symes, R. H., L.R.C.S. Irel., &c., to be Medical Officer at Hughenden, Q., *vice* Dr. J. S. Hunt, resigned.

MEDICAL RESIGNATIONS.

Drake, F. J., M.B., &c., Melb., as Surgeon-Superintendent of the Launceston Hospital, Tas.
Harbison, J. W., M.B., &c., as Public Vaccinator at Shepparton, Vic.
Hunt, J. S., L.R.C.P. Edin., &c., as Medical Officer at Hughenden, Q.
Hart, J. W., M.B., &c., as Government Medical Officer and Vaccinator for district of Barraba, N.S.W.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Wood, Ellen Mauda, Lic. R. Coll. Phys. Edin. 1897; Lic. R. Coll. Surg. Edin. 1897; Lic. Fac. Phys. et Surg. Glasg. 1897.
Scott, Arthur Ernest, M.B. et Mast. Surg. Univ. Edin. 1896.
Binett, Peter Frederick William, Lic. R. Coll. Phys. Edin. 1881; Lic. Fac. Phys. et Surg. Glasg. 1881.
And for additional registration:—
Milford, Frederick, M.D. Univ. Sydney 1892, *ad eundem gradum*.
Additional qualification registered:—
Dick, Robert, D.P.H. Camb. 1897.

SOUTH AUSTRALIA.

Johnston, Arthur Alma, L.K.Q.C.P. Irel. 1875; M.K.Q.C.P. Irel. 1890; L.R.C.S. Edin. 1876.

NEW ZEALAND.

The following have applied for registration:—
Caro, Edgar Robert St. John, M.D. Univ. Michigan, U.S.A.
Purchas, Frederic Maurice, M.B., C.M. Univ. Edin.
Siedeberg, Emily Hancock, M.B., Bac. Surg. Univ. N.Z., L.R.C.P. Irel.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

GREEN.—On January 29, at 42 College-street, Sydney, the wife of Dr. Terence Green, of a son.
HART.—On February 6, at Gunning, N.S.W., the wife of John W. Hart, M.B., O.M., of a daughter.
M'KAY.—On January 1, at Lane-street, Broken Hill, the wife of J. G. M'Kay, M.B., M.R.C.S., of a son.
TRINDALL.—On January 22, at 2 Erskineville-road, Newtown, Sydney, the wife of Dr. R. B. Trindall, of a daughter.

MARRIAGES.

O'ALLAGHAN—COWPER.—On December 29, 1892, at St. Andrew's Cathedral, Sydney, by the Venerable Archdeacon Langley, assisted by the Precentor, Lionel Cowper, eldest son of Dr. O'Allaghan, Rockhampton, Queensland, to Margaret Florence, youngest surviving daughter of the late William Cowper, of Goulburn, N.S.W.
FULLERTON—OLARK.—On December 21, at the residence of the bride's parents, by the Rev. A. McDonald, Robert John Fullerton, L.R.C.P., &c., of Birchip, Vic., to Lily, youngest daughter of William Clark, Tal-el-Kebir, Mont Albert.
HINDER—POCKLEY.—On January 17, at All Saints' Church, St. Heliers, Jersey, by the vicar, the Rev. Hugh Minton Semhouse M.A., Dr. H. V. Critchley Hinder, of Summerlee, Ashfield, Sydney, to Enid Marguerite, daughter of the late Robert Francis Pockley, of Lorne, Gordon, N.S.W.

DEATHS.

BENJAMIN.—On January 2, at Waverley, N.S.W., Charlotte, widow of the late Dr. Richard Downman Benjamin.
LITTLE.—On January 22, at her residence, Enfield, N.S.W., Mary Gertrude, beloved wife of William Little, M.D.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

THE STUDENT AND HIS WORK.

OPENING LECTURE.

MELBOURNE HOSPITAL CLINICAL SCHOOL—
SESSION 1898.

By J. W. SPRINGTHORPE, M.A., M.D., M.R.C.P.,
PHYSICIAN TO THE HOSPITAL.

As Chairman of the Hospital Staff for the year the duty devolves upon me of formally welcoming the medical students of our University to this the clinical portion of their work, and I need hardly say that it affords me (a son of the same Alma Mater) especial pride and pleasure thus to inaugurate another clinical year.

The day itself is also an auspicious one, being the 36th anniversary of the founding of our Medical School, and the temptation was great to bring before you some of those personal reminiscences that already cling around our School and Hospital, and which are as suggestive for the future as they are noteworthy from the past. But the not infrequent absence of satisfactoriness in the ways and aims of many of our students, and the accession of no inconsiderable or unimportant a section from a sister University in distress, with no interest in such retrospect, have induced me to invite your attention rather in the direction of some brief suggestions as to the best method and aim of your study.

Pursuant to that great law of development, whose confines seem boundless, the medical student of to-day is but the present phase of a series of educational types, the most important of which have previously been known under the names of the medicine man, the alchemist, the leech, and the apprentice. That the present is an improvement upon the past is almost a necessary corollary, and will no doubt be at once admitted by all present. But its incubation, you will, I fancy, also freely admit, is still imperfect and unsatisfactory. It is so prolific that the finer personal influence and discipline exercised on his prototypes has become little better than a tradition, whilst his diet scale has been made so varied and exhaustive that dyspeptic troubles are the rule, and a natural and practical order of meals a digestive impos-

sibility. Still—such is his native vitality—he would probably survive all these early troubles and flourish the more exceedingly, were it not for the still graver drawbacks that attend his official recognition, and for which, indeed, the cynical are accordingly not unthankful. To him at least, however, the matter is far beyond a joke. For when hauled up before the registering—let us call them angels—he finds rapidity of response taken as the main test of efficiency, no allowance made for difference of temperament, condition of health, or even—with bated breath be it said—examiners' peculiarities. What he knows of a year's lectures is gleaned from three to six hours' writing—typewriting and shorthand prohibited—whilst a few minutes' clinical examination suffices for the diagnosis of the effects of as many months' clinical digestion. Accordingly he himself is sometimes in doubt whether he is, after it all, really an honour man, a pass man, or that scapegoat "plucked," though the Examining Board have no scruples in settling the question swiftly and definitely for him. One consolation, however, remains, though the student at least is often unable to find much comfort in it. Still it is an important one, and does exist, and it is mainly to point out this compensating advantage, and not to be simply hypercritical, that I have given the matter this prominence. It is that he should always remember it is in the learning, and not in the examination, that the real merit and final gain are to be found, and that if class lists are the mark of the lucky, or even the more deserving few, the learning is equally open to all, and if Hospital as well as University prizes do go with the class success—and under present conditions it is, perhaps, best that they should (though some day they, too, like the Oriel Scholarships of old, may follow the better test of *propter spem-et rem*)—the larger prizes in the larger world are by no means so distributed. Let, then, the student aim high, even academically here, as elsewhere, achievement is often measured by attempt, but let him not attach undue weight to the results of incomplete competitive examinations, or think that the inner garden of knowledge can only be entered by privileged University or Hospital ticket. All may enter who earnestly strive, though the academic prizes fall but to the initiated few.

A great measure of relief also may be expected, in our particular instance, from the contemplated re-modelling of our Melbourne

medical curriculum. This, of course, is not the time to magnify the school to which we all are proud to belong—that has already been done for us by competent outsiders—nor is this the place to speak of defects, other than those which affect our hospital work. But it will undoubtedly be a great clinical gain when, as directed by the General Medical Council, the final year of study is freed from the incubus of University lectures; when our fourth and fifth year students come to the hospital better prepared to avail themselves of their clinical advantages; when our third year students know some physiology before we are asked to teach them the methods of examining medical patients, and the second year students have been taught anatomy before we are called upon to give them instruction in minor surgery. Until, indeed, such anomalies are removed, no general teaching by the staff as a whole, or tutorial work by individual members, such as have been freely and ungrudgingly attempted in the past, can be other than partially satisfactory, whilst clinical work generally, both in and outdoor, will be largely improved by the greater facilities for hospital practice which the revised curriculum must afford both senior and junior students. But even in the absence of these desirable amendments the whole hospital staff, you may rest assured, is still not unmindful of its clinical duties, and more anxious, perhaps, than ever to discharge them to the best of its ability. New, and, we trust, better arrangements, are being made regarding clinical lectures and teaching, an improved out-patient department will shortly take the place of the present inadequate bequest of former years, whilst in the hospital itself there is still that plethora of medical and surgical material which make it unsurpassed for clinical purposes in the Southern Hemisphere.

We can now fairly face the most important point of all, viz.: How should the student set himself to his work? There is no royal road to learning, which, and not the display of it, should, we have seen, be the main end for which the student frequents the hospital; and little can, of course, be said that has not often been said before. But some local guide-book is always of value, and to me at least, it seems that your rules for successful work might be well summarised as follows:—(1.) Regularity and punctuality in attendance come first; they are in themselves little things, but they underlie all else; without them effort is fitful, and invaluable opportunities are lost, never to be regained. (2.) The student's next essential is

the systematic training of the senses, those channels of all knowledge. Give, then, eye, ear, touch and smell all possible opportunities of conveying all possible messages to the cerebrum. Not only do they thus become the trained servants of the intelligence, with all the extra efficiency that such exercise connotes, but they build up in the brain tissues that storage of impressions which constitutes memory and forms the basis of action. Only thus, indeed, is real lasting knowledge acquired. Subsequent reading, and a whole brainful of volition, will prove but poor miserable substitutes. How different, however, this sensory busyness from the lethargy of that casual visitor, whom we all know so well, who saunters now and then through the wards with hands in pockets, eye wandering, ear heedless, and waiting only till the folding doors are reached to slip noiselessly away, pleased and satisfied, until examinations loom in sight. (3.) Almost equally important to the student is the attainment of a practical mastery of the more valuable remedial aids; such, for example, in surgery, as bandaging, application of splints, use of instruments, &c.; and in medicine, the well-thumbed hospital pharmacopœia, the frequent examination of urine, sputum and blood, and the constant reference to pulse, tongue, thermometer, stethoscope and the like—the alphabet of our warfare, without which successful effort is well-nigh impossible. And yet, how comparatively poor the use thus made second nature by too many of our students, of this the armamentarium against disease. How many, indeed, act as if the practice that makes perfect will come later on in some inscrutable way, when almost all incentive to action, and testing of efficiency have reached their minimum. (4.) Thus equipped the student is now ready for what is perhaps his greatest achievement, the thorough mastery of the special cases to which he is dresser or medical clerk. The means to this end will, of course, vary with the individual requirements. But, as a rule, he should make a special point of knowing what his teacher thinks of the case, should himself examine and seek to verify, should ask questions when in doubt or ignorance, and finally, with a good text-book by his side, should study thoroughly, so as to see how far the etiology, symptomatology and treatment correspond with or differ from the typical book description. A few cases thus mastered are invaluable, not only to fix upon the mind the salient points of the special disease, but as a mental and physical training in the proper method of future investigation. (5.) Nor for general work must

the student disregard the frequent study of some one of the many excellent clinical manuals now at his disposal, nor the invaluable aid to the memory afforded by the keeping of a "memo. book" for notes, hints, suggestions, prescriptions and the like—two books which may well be described as the general "stock-in-trade" of the diligent student. Used, as Opie said, "with brains," these will be found of constant and enduring service. (6.) Lastly, the careful student should never neglect the opportunity of seeing *post-mortem* examinations of all sorts of diseases in general, and of his own special cases in particular. For the only clear and reliable idea of disease is obtained from observing the parallelism between pathology and symptomatology. In the fulness of time, when the student becomes the practitioner, he is thus enabled to picture to himself a faithful representation of the lesion in a given condition, and, with this in view, to proceed to the appropriate and almost necessary treatment. Only thus can his interference proceed upon a sound basis and be rescued from the quagmires of empiricism.

Such, then, are, in my opinion, the main lines along which our student of medicine or surgery should direct his course. But he will make a great mistake if he rests content with what these fairly exact studies thus teach him. For his *raison d'être* as a practitioner is not simply, after becoming perfect in anatomy, and instructed in physiology, to make himself practised in *materiu medica et chirurgia*, an adept in symptomatology, and skilled in pathology. All these, indeed, he should strive to become, but above all he must never forget that his real work is remedial, and his proper aim the prevention, relief, or cure of disease. And he will find that, in addition to all the foregoing, questions of maintaining and regaining health demand a deep and increasing knowledge of human nature. Somewhat to his amazement, perhaps, he will early see that therapeutic success does not necessarily follow the dicta of scientific precision, and that broadness of view, common sense, sympathy and personality are of unsuspected and paramount importance, and may more than compensate even for comparative absence of erudition, or manipulative dexterity. And if he is wise, he will rise out of the littleness that cramps the pedant and hampers the schoolman, and note for future guidance the manifold ways in which diseased humanity, like human nature generally, is open to influence, and even examine himself to see along what lines his own maximum of influence is likely to be propelled. He will thus come to

act as the servant of Nature, and not as if he were her master, and to recognise that results are obtained not by miraculous interference, but by obedience to law. He will progressively seek to know these laws in their personal applications rather than to content himself with attempts more or less futile to counteract so far as he can, by drugs or otherwise, what are simply the results of their repeated transgression. With the Father of Medicine himself, he will perceive that the practitioner's duty is to try to favourably influence the future, after ascertaining the past, and examining the present; a very different conception from Voltaire's "pouring drugs of which he knows little into bodies of which he knows less," and one very different also from our friend Professor Watson's timely definition of the legally qualified quack, "the man with a recognition of symptoms, a book of prescriptions, and a pleasant manner."

But after all his work, what is the student's outlook? A poor trade—as has so often been remarked—but an unsurpassed profession. For the rank and file there will probably be a competency—won too often, however, at the cost of a hard and even shortened life—and a social position and influence that, if less than their desert, are still not to be despised. But, judged from business standpoints and business ideals, ours still remains a comparatively poor trade, and not to be desired or recommended on such grounds alone. And yet, unfortunately, an increasing number are entering it upon such grounds, and seem actuated by such ideas. And, whilst probably they will in the no distant future reap the reward they expect, they are at the same time practically degrading for others, as well as for themselves, a social service that was never intended to be so circumscribed or humiliated. It would be well, indeed for all concerned, if all such intending medical traders would only take themselves off to more congenial and lucrative modes of making a good living.

But for those who look higher and beyond—and fortunately they are still the large majority—our profession offers to the best that is in our nature a satisfaction that is unique and as complex as human life itself. There is, indeed, no limit to the returns that it can give to the intellectual and the moral senses, though it must be again confessed that the bodily calls are too often irksome and excessive, and the material gains generally notably inadequate. And so far from being a circumscribed study, it is one of incessant progress and unlimited scope. Even now, at the close of this nine-

teenth century, we seem only at the beginning of its mysteries. Thus the last few years have witnessed the re-writing of the anatomy of the nervous system, a new physiology of the blood, and a re-modelling of the whole conception of disease. And when therapeutics was beginning to talk of its boundaries, and settle itself down to re-examine its past successes, new wonders of surpassing interest were shown to exist in organic chemistry, and a new world brought to life in organo- and sero-therapy. Even observation of regions hitherto considered to have been thoroughly explored is ever disclosing fresh material. For example, only modern hands have handled post-nasal growths, though they were within reach of all ancient fingers; and the open secret of appendicitis, with all its sudden and serious dangers, has even more recently been made clear to eyes that had for generations been used without knowledge. And amidst the countless numbers of such fresh lights and new discoveries, we have, moulding and altering all, the operations of those great laws of the interdependence of life and the development of species, by which cycles of change are ever being introduced into the realm of disease itself. "Nothing more to find out," is the cry of folly in the night of ignorance, and is nowhere true, least of all in our great and glorious art.

Such then, fellow students, is the task and outlook that are before us. Let us ever regard our profession as a noble calling, as well as a reputable living. And though there be many pilgrims to the shrine, still there is room for all the deserving ones, and the temple itself, as we have seen, is more worthy of resort than ever it was before; whilst many are the places still vacant amongst the niches that are raised aloft for those worthy of honour. And nowhere, perhaps, more so than in that part which pertains to our own land, with its wealth of unexplored departments and its paucity of devotees.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

THE Annual General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 25th March, at 8.15 p.m.

Business:—Report of Council and Treasurer's Statement; Presidential Address; Election of Council.

Members are reminded that the annual subscription for the current year (£2 2s.) is now due, and should be forwarded to the Hon. Treasurer, Dr. Crago, 34 College-street, Sydney.

GEO. E. RENNIE, Hon. Secretary.

A RARE FORM OF HEPATIC CIRRHOSIS.

BY A. JEFFERIS TURNER, M.D. LOND.,
BRISBANE.

THE case related came under my notice two years ago. Although my notes are very far from complete, it is perhaps worth putting on record, as I may have to wait long before seeing another like it.

It concerns a boy aged seven years, who was admitted into the Children's Hospital complaining of headache, languor, and pains and distension of the abdomen. His temperature was normal, pulse rather frequent, full, and compressible. The conjunctivæ were faintly but distinctly jaundiced, and the skin sallow. The urine was dark, and contained bile pigment, but no albumen. The bowels were constipated and motions pale. On examination the abdomen appeared considerably enlarged, mostly with tympanites, but careful percussion, with change of posture, revealed the presence of some fluid. There was no tenderness to palpation. The liver could not be felt, and the area of hepatic dulness was doubtfully diminished, but the spleen was markedly enlarged.

As the case was evidently one out of the common, I watched it with some interest. The boy never complained, but had always a heavy, apathetic expression. In addition to the symptoms described, there was a systolic bruit most distinct over the pulmonary cartilage, which I took to be hæmemic. Apex beat was in normal position. On one occasion, when auscultating, I was surprised to hear a distinct pericardial rub, and this was detected on several occasions subsequently. There were no other signs of pericarditis, and he remained afebrile. No abnormal signs were present in the lungs or pleuræ.

Treatment consisted of careful dieting, with rest in bed for several weeks, together with the routine administration of saline aperients. After six weeks, with but little improvement, he was given Iodide of Potassium, first three and later four grains three times daily. This appeared to do good, and he was therefore ordered a short course of mercurial inunction.

On his discharge, after five months' treatment, he was certainly much better; the ascites had long disappeared, and the abdomen was much smaller, but still somewhat full. The spleen could still be felt, and though there was no distinct jaundice the conjunctivæ were not so clear white as to be normal.

Three months later he was re-admitted with a recurrence of the old trouble. The conjunctivæ were slightly jaundiced, the abdomen much distended, with well-marked ascites. The legs were slightly cedematous also. The spleen was enlarged. There was a faint systolic bruit over pulmonary artery, but no pericardial sounds. The third day after admission he had a sudden, apparently causeless, rise of temperature to 104.6° , accompanied by drowsiness. Except on this day he had no fever worth mentioning, his temperature very rarely rising above 1.0° .

Under renewed treatment, by saline aperients and Iodide of Potassium, the ascites slowly disappeared, and he recovered much of his health, the spleen, however remaining large. He left the hospital after three months. I then lost sight of him, as his relatives apparently thought a change of medical advice would be worth trying; but fortunately the courtesy of Dr. A. C. Y. Halford, in supplying me with notes of his final illness and *post-mortem* examination, enables me to give further particulars.

Six weeks after his discharge he was admitted into the Brisbane General Hospital with symptoms of greater severity than he had previously suffered from. I cannot do better than give what follows in Dr. Halford's own words:—

"Symptoms on Admission.—Acute ascites, restlessness and delirium; pupils rather contracted, reacting to light; pulse 150 and small, respiration 36, temperature 102.6° (rectal), skin jaundiced.

"Patient's Mother States: That her child left the Children's Hospital about the first week in January—a little over six weeks ago—apparently in 'his usual health.' He had been at home two days when he became listless and easily tired. His condition was very variable, being bright and cheerful one day, and in bed the next. Always retained a good appetite. Had no unusual swelling of the abdomen until last week, when a slight degree of distension was noticed. This has rapidly increased. Some swelling was also noticed in the feet and legs two days ago. Bowels have always been inclined to be loose. Urine scanty and high-coloured. Has not complained much of any definite pain. Refers most of his uneasiness to the umbilical region.

"The distention being very acute on admission, and his condition grave, it was deemed advisable to tap the abdomen to relieve the embarrassment of both heart and respiration.

"Seventy-two (72) ounces of straw-coloured ascitic fluid were withdrawn, leaving a certain

amount behind. There was sufficient laxity of the abdominal wall to allow one to make out the liver dulness, which was very much decreased. No other abnormality was discovered.

"The condition of the patient was not much improved by the operation, though there was less restlessness, and the boy slept a good deal. The pulse continued to range between 132 and 152. The following day extreme restlessness and some pain returned. As the result of taking a mixture every four hours, containing Mag. Sulph. $\mathfrak{z}\text{i}$., Acid. Sulph. dil., $\mathfrak{M}\text{v}$., Inf. Jaborandi $\mathfrak{z}\text{ii}$., the bowels were very loose. To allay the restlessness small doses of Pot. Brom. and Chloral Hyd. were administered with good effect.

"22nd.—Patient restless and screaming out every ten minutes. Signs of retention; $\mathfrak{z}\text{xxviii}$. of urine drawn off. Had previously passed urine with stools, which were loose, yellow, offensive and slimy. Urine 10.15, containing bile albumen $\frac{1}{8}$. Dr. C. Kebbell ordered Calomel gr. $\frac{1}{2}$ t.d.s. Patient delirious all day, jaundice more intense.

"23rd, 6 a.m.—Catheter passed; $\mathfrak{z}\text{vi}$. urine drawn off. Temperature, which had declined to 101° F. (having been continuous at about 102°), now began to rise, and continued to do so during the day, and reached 106.8° F. at 8 p.m. Condition now approaching coma, pulse very small and rapid (152). Respiration laboured; distension of abdomen not greatly increased. Hypodermic injections of Æther $\mathfrak{M}\text{x}$. every hour. Pulse failed at 1.50 p.m., 24th February, 1897. Temp. at death, 107° F."

From Dr. Halford's notes of the *post-mortem* examination I abstract the following particulars:—

"Post-mortem.—Slight jaundice. Pericardium shows white thickenings, resembling old pericarditis. Heart valves healthy. Lungs showed extensive areas of collapse and congestion; no pleural adhesions. Peritoneal cavity contained about five pints of clear fluid. Liver much reduced in size, weighs $1\frac{1}{4}$ lbs., surface nodulated; the cut section at once assumed a markedly convex surface, and showed abundant fibrous tissue; the whole organ tinged with yellow; extensive adhesions to diaphragm, parietal peritoneum, and upper end of right kidney. Kidneys show cloudy swelling, otherwise normal. Spleen much enlarged and cirrhotic."

That cirrhosis of the liver is a rare disease in childhood all authors are agreed. Nevertheless, by searching through medical literature, a considerable number of cases have been collected. If we exclude such secondary, or slight,

forms as those due to cardiac disease, or rickets, cirrhosis of this organ may be divided, as in adults, according to causation, into three classes—alcoholic, malarial, and syphilitic. To these may be added a fourth class, those due to unknown causes. In the present instance the second class may, I think, be excluded, the child having been always resident in Southern Queensland, where true malaria is very rare, and only met with under certain conditions—for instance, among railway constructors. It is true that we sometimes hear other diseases spoken of as 'malarial,' but in this application 'malarial' must, I think, be considered equivalent to zero—that is to say, a word having no meaning.

Alcoholic cirrhosis has been recorded not infrequently among children, but in the present instance I was unable to obtain any evidence of such a causation. Neither did I obtain any corroborative evidence of syphilis, though this is the theory of causation that I incline to. The *post-mortem*, it is true, did not reveal the presence of gummata, and the simple form of syphilitic cirrhosis appears to be mostly a disease of infancy. Little weight can perhaps be attached to the extensive perihepatitis, and the cirrhotic condition of the spleen. But these, taken in connection with the pericardial changes, which were not. I think, due to simple pericarditis, seem to point to a general cause, not one acting exclusively on the liver, and syphilis appears to me the most probable.

In this connection I may briefly mention the only other case of hepatic cirrhosis which I have seen in a child. The patient, a girl of about the same age as this boy, suffered from a febrile attack simulating typhoid fever. After the fever subsided ascites developed, for which she was tapped several times, clear serous fluid coming away. After tapping the liver could be felt to be considerably enlarged and hard. In addition to tapping, Iodide of Potassium was given, and to my surprise the child eventually made a complete recovery. I am sorry I cannot give fuller details of her case, which occurred in Brisbane many years ago, but I was quite satisfied at the time that it was due neither to alcohol nor syphilis. What the cause may have been I do not know; but these two cases, incomplete as they are, show, I think, that we have something yet to learn about hepatic cirrhosis during early life, and I hope they may direct attention to the subject. This, and the desire to fill up an otherwise vacant evening, can be my only excuse for bringing such imperfectly reported cases before this meeting.

METHOD OF PREPARING KANGAROO TENDONS FOR SURGICAL OPERATIONS.

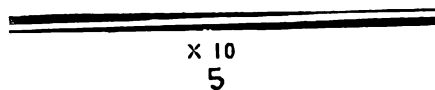
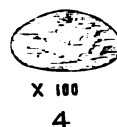
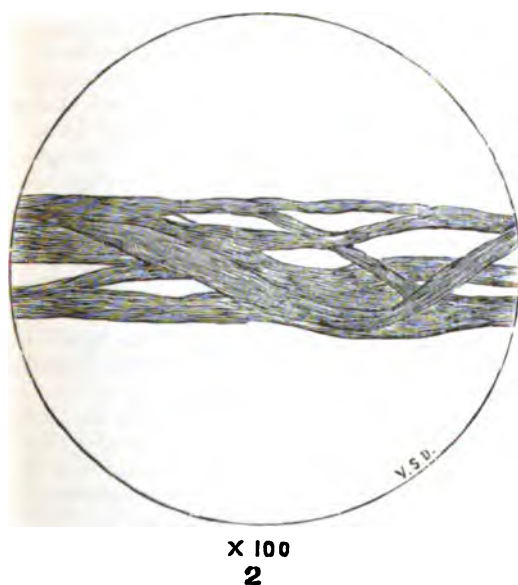
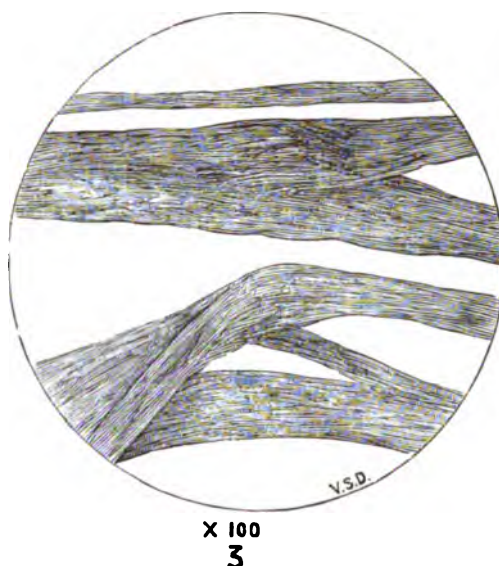
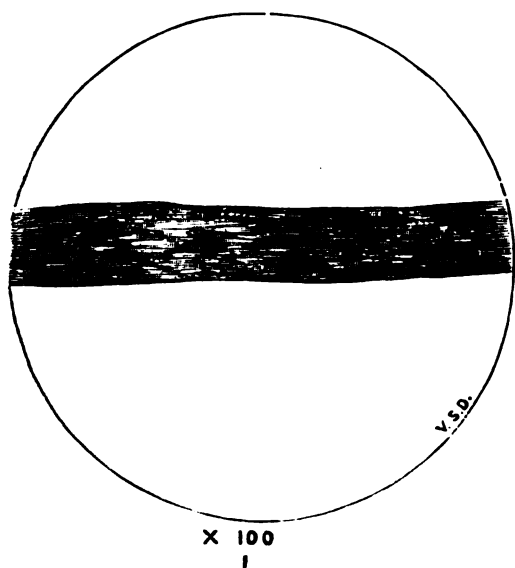
By VETERINARY SURGEON DESMOND, BACTERIOLOGIST, MELBOURNE VETERINARY COLLEGE.

THE first to bring kangaroo tendons before the medical profession was Mr. T. M. Girdlestone, F.R.C.S., of Collins-street, Melbourne, at a meeting of the Medical Society of Victoria, and by a paper communicated by Mr. Thomas Smith, F.R.C.S., at the Royal and Chirurgical Society of London, on the 14th February, 1882. To Mr. Girdlestone I am indebted for instructions in the method of preparing them for surgeons' use.

I will now give a brief *resumé* of the steps taken in the preparation. When the kangaroo is killed the tail is cut off high into the haunches, immediately at the end of the spine. By this method the end of the muscles, with the tendons attached, that form the haunches are removed with the tail, and allow the full length of the tendons to be secured. Another advantage is that the insertion of the tendons into the muscles is secured, and as they taper off to a very fine edge they are suitable for passing through the eye of suture or aneurism needles. When the tail is removed, the end with the muscles attached is wrapped up in a clean piece of soft linen which has been soaked in some preserving fluid.

The next step is the removing of the tendons from the tail. This is accomplished in the following manner, *i.e.*, an incision is made in the under surface of the tail through the skin—the under surface is selected because the upper part has two tendons that unite into one just before their fixture to the joint. By cutting the skin on the upper surface a risk is run in dividing these tendons when cutting the skin. When the skin is cut through from the tip to the haunches it is removed by forcibly pulling it back, when the tendons in their sheaths are exposed to view. The tail, minus the skin, is then secured by hooks on a clean board covered with a clean soft piece of linen saturated with a solution of carbolic acid 1 in 40.

The tendons are then dissected out, each singly, care being taken not to cut them in the dissecting, as a tendon with an abrasion on its surface should not be used. (See plate III.) As they are removed from the tail they are placed in a clean vessel containing boiled rain water that has been filtered, or distilled water that has been sterilised, and allowed to remain 24 hours.



The next step in their preparation is the most important. After being in the water for 24 hours they are freed from fascia and loose tissue, and again placed in another vessel containing water prepared as above. When removing the fascia, care is taken to prevent it forming small rolls around the tendon, as a roll of fascia encircling a tendon will prevent it being passed through the eye of a needle, or it may cause a subsequent flaying. During this

process great care is required to see that the tendons are not split. A tendon may be split in its preparation, and in the drying the tear will lie so close in apposition that it will not be perceptible to the naked eye when they are dry or in oil. After remaining a few hours in the second lot of water they are again carefully examined, and then placed to dry on sheets of paper saturated with carbolic oil prepared *secundum artem*.

In placing them to dry, great care is taken that they are not twisted, and that they are placed in straight lines, with the flattened side downwards. They are then covered with sheets of paper saturated with the specially prepared carbolic oil to keep away dust. When dry they are again examined with aseptic hands, and classified according to their thickness.

They can be kept in a dry state in a closed vessel if previously rolled up in paper saturated with carbolic oil, or they can be kept in strong carbolic oil 1 in 6. They will require to be placed in an aqueous solution of carbolic acid before they can be used. This can be done in the same vessel that the instruments are placed in to prepare them for an aseptic operation. Tendons can be procured of the following thicknesses, viz, the finest $\frac{1}{16}$ th inch, the thickest $\frac{1}{8}$ th inch.

The accompanying plates will give an idea of good and bad tendons:—

Plate I. shows a sound tendon magnified 100 diameters, drawn direct from the microscope.

Plate II. shows a flayed tendon, magnified 100 diameters.

Plate III. shows on the top a tendon split obliquely, and on the bottom a twisted and flayed tendon.

Plate IV., a section of a sound tendon. Note the flattened sides.

Plate V. shows a tendon split obliquely, which occurs when a tendon is split to try and make a thin ligature or suture out of a thick tendon.

I am of opinion that I was the first to use kangaroo tendons in veterinary operations, and so far have found them far superior to any other suture or ligature. Professor Kendall, of the Melbourne Veterinary College, and Dr. R. H. Harrison, Veterinary Surgeon, Atchison, Kansas, United States of America, speak very highly of them both as sutures and ligatures.

Mr. Girdlestone says in his article that they can be procured for almost *nil*. This I cannot agree with. Kangaroo tendons removed *en masse*, or rudely dissected out by bushmen, are very inferior, of which plates II. and III. are samples. Mr. Girdlestone's paper was written in 1882, when kangaroos were plentiful. Now we have to send over 300 miles to get tails. It is a good day's work to prepare 200 tendons. It is very tedious, and requires a lot of patience.

A good business could be done in kangaroo tendons if only good samples were placed on the market, but I fear surgical instrument makers and chemists, who are the principal purchasers from bushmen, will ruin the future of kangaroo tendons by placing very inferior ones on the market.

THE 1897 EPIDEMIC OF DENGUE IN NORTH QUEENSLAND.

A REPORT BY F. E. HARE, M.D., LATE OF CHARTERS TOWERS.

THE epidemics known as Dengue, which since 1894 have swept North Queensland, and more recently the central and southern portion of the colony, are of great interest and importance, not through their influence on the death rate, but from the fact that they have greatly interfered with industry, and thereby occasioned great financial loss to the community.

In hospitals the disease is the cause of much confusion. All sorts of cases take it, and occasion, at first at any rate, much anxiety. This is especially true of major operations, such as abdominal sections, which might be expected to heal without fever. It frequently attacks typhoid cases during convalescence, or even, I believe, during the continuance of the fever.

With the object of gathering information concerning the recent epidemic, viz., that of 1897, circulars were sent to most of the medical men in North Queensland, and to a few elsewhere. Answers were received from the following, to whom the writer wishes to express his thanks:—Drs. Salter, Thursday Island; Kortum, Cooktown; Robin, Port Douglas; Humphry, Townsville; Nisbet, Townsville; Forrest, Charters Towers; Hunt, Hughenden; Symes, Hughenden; Macdonald, Geraldton; Macdonald, Ingham; Macdonald, Rockhampton; Macdonnell, Herberton; Bowkett, Winton; Roth, late of Normanston; Brown, Bowen; Lloyd, Mackay; Falkner, Toowoomba; Garde, Maryborough. Use has also been made of a report by Dr. Koch to the Cairns Municipal Council.

The origin of the disease in North Queensland is obscure. There is no doubt that an extensive epidemic existed during the early months of 1885, and several old residents have assured me that similar epidemics were not infrequent in the seventies. Since 1894 it has been more or less prevalent during the early months of the year, i.e., from February or March to May or June. The epidemic of last year, however, would seem to have been more serious and widespread than hitherto.

Infectivity.—That the disease is intensely infectious, and that it spreads by direct infection from one person to another, there is ample evidence. The epidemic of last year commenced at Cooktown on January the 8th, attained its height in February, and was practically extinct by the middle of March. Port

Douglass was next attacked, but not until February 5; Cairns on February 8. From Cairns the disease was imported into Charters Towers on February 22 by a party of tourists, who had come down from Thursday Island, calling at all the intermediate ports. At this time it had not as yet assumed the epidemic form in Townsville. The party referred to resided in the middle of Charters Towers, and the epidemic spread thence in gradually increasing circles towards the outskirts. Towards the end of the epidemic the disease was raging in the outskirts, while the central portion of the town was free. The epidemic commenced in Townsville about the last week in February; Normanton and Mackay were attacked on March 2; Geraldton, on March 4; Hughenden, on March 5; Thursday Island early in the same month; Ingham, on March 22; and Bowen not until May 30. Herberton has escaped the epidemic of 1897, and appears to have been only slightly affected previously.

As in Charters Towers, so in most towns, the outbreak was distinctly traceable to an imported case. Thus in Normanton the first case arrived ill from Cooktown. The second case was the medical man who attended her, and who contracted the disease after a week's exposure. At Cairns, in all the early cases that occurred, some intercourse with people coming from Cooktown could be traced. Into Mackay the disease was imported by a commercial traveller, and it radiated round the hotel where he stayed.

Period of Infectivity.—I have not obtained any evidence as to the duration of the period of infectivity. It may, perhaps, be assumed to persist as in other eruptive fevers, until desquamation is complete.

Incubation Period.—There is plenty of evidence to show that the incubation period does not extend beyond one week. The best evidence, however, on this point comes from Townsville. Dr. Humphry, the Government Medical Officer, states that two employees of the Stewart's Creek Gaol, where there was no fever, went on the Queen's Birthday to Townsville during the epidemic, and spent the day there. Both were attacked exactly five days later. Although this is the only direct evidence I have obtained on this point, all other evidence is, at least, not incompatible therewith.

Geography.—The disease is essentially tropical, latitude and temperature appearing to exert a distinct influence on its prevalence, if not, indeed, on its severity also. At Thursday Island it is estimated that only 3 or 4 per cent. of the population escaped; at Geraldton, 5 per

cent.; at Cooktown, 10 per cent.; along the northern line from Townsville to Charters Towers and Hughenden, about 25 per cent.; in Maryborough, in the south, about 80 per cent.

At Charters Towers it was frequently observed that a few cold days were followed by a sensible diminution in the number of new cases, and that a recrudescence succeeded a recurrence of warm weather. In previous years the epidemic has ceased by the beginning of June. Last year, however, there was an almost total absence of really cold weather, consequently odd cases continued to occur through the winter into the present summer. The exemption of Herberton is, therefore, probably to be explained by its altitude and comparatively cold climate.

Duration of Epidemic.—The duration of the epidemic in individual centres would appear to depend mainly upon two factors: (1) The proximity of the date of importation to cold weather; (2) the number of persons rendered immune by the existing or a previous epidemic. It is conceivable that through comparative isolation, and perhaps good luck, some centres might escape infection until late in the autumn, when the epidemic would not have time to spread to a great extent. This seems to have been the case at Bowen. It is more difficult to explain the comparative immunity of Ingham, where, although the disease was noted as early as March 22, about 95 per cent. of the population escaped.

Duration of Immunity.—The duration of immunity is difficult to fix. At Cairns, Thursday Island, Charters Towers, and elsewhere large numbers have been attacked of those who had gone through the disease two years previously, the second attacks being usually equally, and in some cases more severe than the first; a few cases have had an attack every year. All that can be said at present is that immunity does not extend in the majority beyond two years.

Asserted Immunity of Children.—There is a general opinion that children are less liable than adults, especially male adults, to contract the disease. Personally, I have noticed that when once the disease obtained entrance into a family it usually attacked every member, though very young infants appeared to escape somewhat.

Symptomatology.—Invasion.

In a very few cases there is a history of two or three days' slight indisposition, but even in these, and in the great majority, the invasion is remarkably sudden. In nearly all cases the

patient can fix the time even to the hour of onset. Exceptions must, of course, be made in those cases in which the onset is at night during sleep, and in which it is only possible for the patient to say that he went to bed well and awoke feeling very ill.

Temperature, Course and Duration.—The temperature curve is usually characteristic. It may, however, be divided into two types: (1) Those presenting a remission only; (2) those in which there is a distinct afebrile intermission. In both at the onset the temperature rises rapidly, usually attaining its maximum on the first evening. This may be anywhere between 101° and 105° , rarely 106° , but is more frequently about 103° .

In the remittent form the second and third days show a progressive decrease of fever, with morning falls and evening rises. On the fourth day, or sometimes not until the fifth, there is a sudden rise of temperature, usually less, though not infrequently greater, than the initial rise.

This final rise in temperature is quickly followed by a rapid fall to, or far more frequently below, the normal, accompanied with profuse sweats. Although the termination of the fever is thus in by far the greater number by distinct crisis, yet cases have been observed in which it has been by rapid lysis, the temperature falling steadily through a period of about 12 hours.

In the intermittent form the third and fourth days may be quite afebrile, followed on the fifth day by a sudden rise and an equally sudden fall.

Manson states that in the vast majority of cases the first and most acute stage of the fever is abruptly terminated about the second day by crisis, with diaphoresis, diarrhoea, diuresis, or epistaxis. I have never seen crisis at this period, nor do any of my correspondents refer to it.

The adjoined charts exemplify the two varieties.

CHART I.

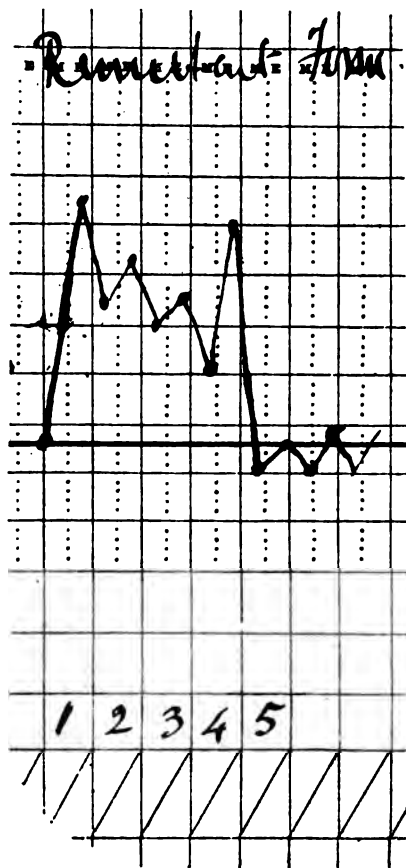
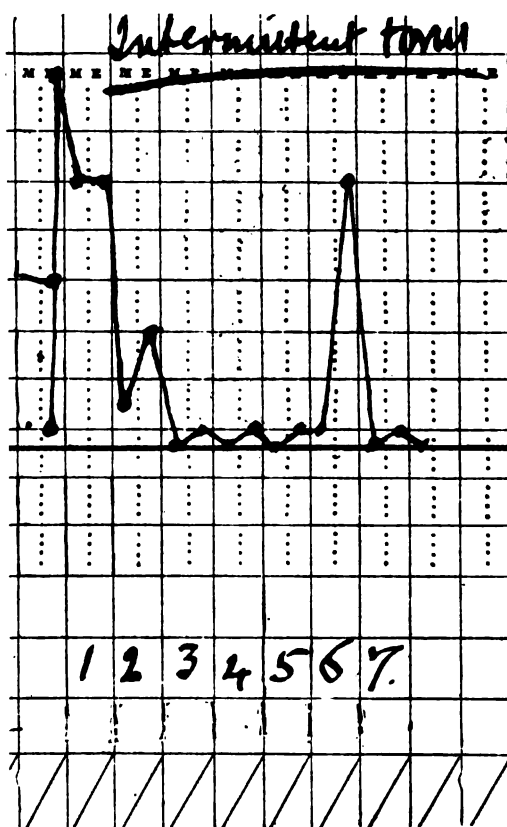


CHART II.



It is to be observed that, although in marked examples the types are quite distinct, yet all intermediate gradations between them are commonly observed. This probably accounts for the difference of opinion which exists as to the relative frequency of the two types. My own observations, and those of the majority of my correspondents, tends to the conclusion that the remittent type is much the more frequent (probably as ten is to one).

In the remittent form the severity of the cases is inversely proportionate to the amount of the remission; *a fortiori* cases showing complete intermission are almost always mild. On the other hand, cases in which the temperature falls but slightly on the second and third days are usually very severe, and are apt to be prolonged for five or six days.

Abortive cases of the disease are not very uncommon. These commence as do the intermittent cases, and reach the normal on the second or third day. The final rise, however, is absent, and the terminal rash does not appear.

The duration of the febrile period is variously stated to be from two to ten days. Latitude appears to have some influence. Then at Maryborough the average duration is stated to be two or three days; at Thursday Island, seven days. My own experience is that, in those cases where I have been careful to observe the exact time of onset, the duration has been in the great majority four and a half or five days, *i.e.*, 105 to 120 hours, and this coincides with the experience of other observers in Charters Towers, Townsville, and Hughenden.

There seems to be a tendency for the cases which present a distinct intermission, to exceed this period by a day or two, as if the interposed afebrile period were not counted in the febrile cycle.

Cases which exceed five days without intermission are usually very severe.

Following the crisis there are often a few days during which the temperature remains sub-normal morning and evening. In some, however, there is a slight evening rise to 99.6° or 100°. These casual "recoil" elevations on the first day or two of convalescence have not been included in computing the duration of the fever: their occurrence may explain the fact that some observers have put the *average* duration at seven or eight days.

Cases stated to last ten days are probably double attacks, or cases of very early relapse.

Cases reported as lasting two or three weeks should, I am inclined to think, have been submitted to the method of serum diagnosis.

Pain is in most cases a prominent symptom. Headache is usually severe, and is the most constant of all the pains. It is present from the onset; it is most commonly frontal, or located at the back of the eyeballs; sometimes it is vertical. Two of my correspondents refer to cases of distinct neuralgia following the course of one of the superficial nerves.

Pains felt elsewhere are frequently very severe, so much so as to have led in many instances to the diagnosis of rheumatic fever. Though often described as "bone-aches," they appear to be usually muscular in origin. They are situated in the order of their frequency in the back and loins, thighs (especially posteriorly), shoulders and upper arms, the lower costal regions anteriorly, the calves, shins, and knees. In few cases is pain felt in all these sites, yet any combination may be met with. Pain, in fact, may be altogether absent.

Generally speaking, the intensity of all the pains, headache included, follows the course of the temperature. At the initial rise, and for the first two days, they are severe; as the remission approaches, they decrease steadily. When intermission occurs they are absent while it lasts. In some cases during the final exacerbation they do not return to any great degree; but usually they do with all their former severity; while in a few the last night has been described as much the most painful of the attack. At the crisis they suddenly and finally cease, a sensation of extreme comfort taking their place.

Although in individual cases the pain was in proportion to the height of the fever on different days, yet this rule does not hold good for different cases. Not infrequently cases occur in which the pain is out of all proportion to the height of the temperature. In most of the descriptions of Dengue occurring in the West Indies, Burmah, and elsewhere, acute articular pains resembling those of acute Rheumatism, with swelling of the joints, are accorded a prominent position. In the recent North Queensland epidemic these symptoms have been conspicuously absent. Of ten of my correspondents three only have observed swelling of the joints, and then only very rarely. Such swelling as was observed was slight, limited to the fingers and toes, and was apparently peri-articular.

The "post-febrile rheumatic stage" has not been observed.

Digestive Symptoms are more prominent in this than in other pyrexial affections. Complete *anorexia* is present from the start, and in most cases persists to the end, and well into

convalescence. During the intermission when present this symptom may abate considerably ; it has in a few cases been replaced by a feeling of absolute hunger, so that the patient has been induced to indulge in a substantial meal, to his great subsequent discomfort.

Thirst is usually present and severe, although in a few cases it has been noticeably absent.

The *tongue* is as a rule simply covered with a thick moist white or yellowish-white fur ; sometimes the tip and edges are red, and the papillæ prominent ; rarely, but only in severe cases and towards the close, the white coating on the central strip of the dorsum becomes dry and brown.

Nausea, vomiting, and retching are extremely common symptoms. They may be present throughout the attack, but are decidedly most frequent and most severe during the last two days. In many cases the retching towards the end has been so frequent and violent as to lead to small extravasations of blood and slight hæmatemesis.

At this stage *epigastric pain*, increased by food or drink of any kind, is frequently noticed. This symptom has in a few cases persisted for weeks after the termination of the fever.

The *bowels* as a rule are constipated ; much more rarely loose and offensive ; in a few dysenteric in character. In one fatal case the usual critical sweat was replaced by a distinct critical diarrhoea of great severity, accompanied by a state of collapse exactly resembling the algid stage of Asiatic cholera. Marked icterus with very dark bilious urine, was noted in one case by Dr. Kortum, of Cooktown.

The Rash.—The prevalence of rashes is very variously estimated. Thus, at Thursday Island they were observed in 90 % of all cases ; at Normanton and Geraldton in nearly all cases ; while at Maryborough they are stated to be present in only 20 %. Along the intermediate zone indicated by the Northern Railway, i.e., in the centres of Townsville, Charters Towers, and Hughenden, rashes are stated to be present in from 66 to 75 % of all cases.

It is to be remembered (1) that during the epidemic medical men were greatly overworked, and had but little time for details that were therapeutically unimportant ; and (2) that the rashes are frequently inconspicuous. The frequency of rashes is probably, therefore, understated.

The rashes are often divided into two, according to the date of appearance—(1) the initial rash, and (2) the terminal rash. The

initial rash may appear on the first day with the initial rise of temperature. It is often not well marked, and, I am inclined to think, frequently missed. It is usually described as a faint roseolous rash, scarlet or more dusky in colour. It resembles most nearly, in my experience, an ordinary flushed face, but it is distinguished from this by being well marked on the forehead. It is often accompanied with injection of the conjunctivæ, and is usually limited to the forehead, face, and upper chest. During the waning pyrexia of the succeeding days it gradually fades.

The *terminal rash* is contemporaneous with the final exacerbation of the fever on the fourth or fifth day. It is variously regarded as a fresh rash, or a recrudescence of the original one. It has been described as minutely punctiform, resembling in colour scarlatina, but more blotchy and irregular, less commonly like measles. It has also been likened to prickly heat, but with the red spots of which it is composed less elevated. It is usually accompanied with much irritation, and for this reason, I believe, has been more commonly noted than the initial rash. In rare cases it has spread over the whole body surface, being then accompanied with intense general irritation. More commonly it takes the form of red spots on the forearms and legs, with great irritation of the palms and soles, but no visible rash in the latter situations. It is at this period, and especially in children, that the rash is often noted as urticarial in character.

The terminal rash may persist for eight or nine days into convalescence.

Desquamation, which is always fine and branny, usually follows, always when the rash has been well developed, and is accompanied with a continuance of the itching and irritation. At this period the subjective sensations have sometimes been described as terrible.

Dr. Salter, of Thursday Island, is of opinion that the rashes appear on the mucous membranes of the eyes, nose, frontal sinuses, fauces, and pharynx. He states, in evidence thereof, that the irritation of the conjunctivæ is simultaneous with the initial rash, and that the appearance is quite significant, the colour being brick-red, punctiform, and commencing at the inner canthus. The rash can also be seen on the fauces and pharynx. Thus are explained the soreness complained of in these parts, the tense feeling in the eyeballs, and the severe frontal pain. He also suggests that the eruption comes out on the mucous membranes of the œsophagus and stomach ; the vomiting in Dengue is peculiar, the patient having a con

stant sensation of a foreign body in the throat and stomach.

The *pulse* presents no striking peculiarities. It is raised in frequency in proportion to the pyrexia, though most of my correspondents think less so, proportionately, than in other febrile affections. It is to be remembered that Dengue is a short fever, and therefore it is unfair to compare its pulse rate with the average pulse rate of a disease such as a typhoid. A fair comparison would be with the average pulse rate of the first week of typhoid. Such a comparison would disclose but little difference between the pulse rates of the two affections. Some cases of Dengue are noted as having an unusually slow pulse (70, temp. 103°); yet the same occurs frequently in typhoid, and the peculiarity is probably due to the individual rather than the disease. After the crisis it is sometimes very slow, perhaps more so than in other fevers which terminate in the same manner.

Nervous and Physical Symptoms—Nervous symptoms are prominent from the first. Rigors do not occur at the onset, but slight chills are not uncommon. Lassitude, drowsiness, and slight vertigo are frequently met with; muscular prostration is always marked. Sleep-talking and slight delirium occur in the severe cases, especially on the fourth evening during the final exacerbation. Violent delirium amounting to acute delirious mania was present in one of my cases from the second day, persisting until the crisis on the sixth, and during the whole of this time there was absolute insomnia. Restlessness and insomnia are referred to by nearly all of my correspondents as frequent symptoms. Indifference and somnolence is observed in the most severe cases. Distinct aphasia, partly amnesic and partly ataxic, was observed by Dr. Hunt in one case. It completely disappeared on convalescence.

It is, however, during early convalescence that physical symptoms are curiously prominent. Although in many cases considerable mental depression exists during the fever, yet in not a few it is quite absent. In *all*, however, except the mildest, it is present after the crisis, then frequently reaching a high grade, and sometimes amounting to a state of acute melancholia. Two of my correspondents mention cases in which there was a distinct suicidal tendency, and one case of actual suicide occurred in Townsville in a previous epidemic. A medical man, in his second attack of Dengue, assured me that dread of the depression which he knew from previous personal experience would follow the fever, was in his case the most prominent feature of the attack.

Genito-urinary Symptoms.—No special characteristics have been noted in the urine; it is simply febrile, becoming pale and copious during convalescence. Slight transitory albumen is found occasionally. Intense pain in the testes and groins, accompanied with frequent and painful micturition, was observed in a few cases. In one of mine the patient, a robust man of 42, was suddenly seized at 6 p.m. with very severe pains in the left testicle and cord. On examination, the parts, especially the epididymis, were found to be slightly swollen and distinctly tender. There was no headache or pain elsewhere. All the usual pains appeared to be concentrated in the one part, where the sensations were described as agonising. By 9.30 p.m. (3½ hours after onset) the temperature had reached 106°. Next day the usual initial rash was observed on the forehead and face. On the morning of the fourth day the temperature, which had been gradually falling, reached the normal, and herpes labialis appeared. During the fifth and sixth days the temperature remained normal, and the pain was but slight. On the seventh, however, there was a severe recurrence of the pain in the testicle and cord, and the temperature shot up to 104°. During the night copious sweating came on for the first time during the fever; in the morning the temperature was sub-normal, and all pain and tenderness had disappeared. This is the case alluded to in Chart II.

Hæmorrhagic Symptoms.—There is a marked tendency to hæmorrhage in the severer cases of Dengue. *Epistaxis* is common, especially in males, during the first day or two of the disease. It is usually preceded by severe frontal headache, and followed by great relief. In one case of Dr. Roth's plugging was necessary.

Bleeding from the gums is referred to by eight of my correspondents. It seems to be rather frequent in severe cases, and when present lasts into convalescence.

Hæmatemesis is referred to by eight. In its slight form it is extremely common, and is caused by the violent retching which supervenes towards the end of the fever. Usually it amounts only to blood-stained mucus. Occasionally, however, it is profuse. Two cases occurred during the epidemic in which it was the immediate cause of the fatal issue. In one of these, however, there was a suspicion of gastric ulcer previously.

Hæmoptysis was not observed in any case. *Slight hæmorrhage from the rectum* is not uncommon. Those who take temperatures in the rectum often find the thermometer blood-stained on removal. In some cases the motions

have presented the appearance of dysenteric diarrhoea.

Purpuric eruptions have occasionally been observed. The tendency to subcutaneous hæmorrhage is often seen, when it has been necessary to give hypodermic injections of morphia, strychnine, and especially ether, large hæmorrhagic extravasation having frequently followed the latter.

Uterine Symptoms.—Nine of my correspondents have not noticed that the disease exerts any special influence on the uterus. Five, however, consider that there is a marked effect thereon. For myself, I regard the uterine phenomena as amongst the most distinctive features of the disease, and in this I am strongly supported by Dr. Nisbet. If menstruation is present it is greatly increased in quantity and prolonged. Frequently when absent at the onset its occurrence is precipitated; in some cases actual flooding has occurred. So marked is this tendency that in one of my cases, in whom I had removed both uterine appendages 18 months previously, and in whom no sign of menstruation had appeared since a few weeks after the operation, rather profuse hæmorrhage came on during the fever. Indeed it was this symptom which led her to seek readmission to the hospital under the idea that she was suffering from a return of her old trouble. In another case of double oophorectomy the metro-taxis following the operation had just ceased when the patient was attacked with Dengue, which was accompanied with a recurrence of the bleeding.

Upon the pregnant uterus the effect, as might have been expected, is also divided. Abortion during the early month is common; during the last month or two premature labour is liable to occur; but during the middle period there would appear to be an absence of accidents in this direction. I am aware that this tendency to miscarriage is not recorded by many of the writers in the text-books; indeed, the statement is frequently made that there is no such tendency.

Relapses.—Three of my correspondents have not observed any relapses; three regard them as not very common; six consider them frequent, or very frequent.

It is difficult to separate relapses from second attacks without an arbitrary definition, thence, probably, the disparity of opinion. Relapses, by which are meant attacks coming on within a few days or a week or so after convalescence, occur undoubtedly, but do not appear to be very common. Dr. Roth saw three, two of which ended fatally. Second attacks, however,

are more common. Dr. Humphry had two cases, each of whom had four attacks within ten months, and I have seen several somewhat similar instances myself. These second attacks are often as severe, if not more so, than the primary fever, and exhibit all the phenomena peculiar to the original attack, e.g., rashes, etc.

Complications.—There appears to be no doubt that, in comparison with nearly all other febrile diseases, true complications are conspicuously absent from Dengue. Of twelve of my correspondents six state emphatically that there are none; one that they are extremely infrequent; two have observed slight bronchitis in rare instances; the remaining three refer to a few cases of dysenteric diarrhoea, gastric affections, and catarrh of the nose and eyes. These last, however, hardly amount to complications, and have already been referred to in considering the symptomatology. Enlarged glands in the neck, somewhat resembling parotitis, are referred to by one observer.

Sequelæ.—In all but the mildest cases the crisis leaves the patient low and weak, with complete anorexia, a fœtid taste in the mouth, which communicates itself to every drink taken, mental depression, and great muscular weakness. This condition may last for a week or ten days, and then gradually, or in some cases suddenly, disappear. The subsequent state of health is described by many as being distinctly above par.

Vertigo may be troublesome for some time; deafness is occasionally present; boils are common. Post-dengue dementia, recovering completely without treatment, is referred to by several; peripheral neuritis has been noticed; pleurisy and asthma follow occasionally. In one of my cases chorea in a rather aggravated form was distinctly traced to an attack of Dengue. Chronic urticaria has also followed.

The diagnosis does not seem to have presented much difficulty, as the disease has always been present in the epidemic form. From influenza, the only other epidemic which might cause confusion, the almost complete absence of catarrhal and chest affections, the severity of the pains, and the peculiar irritable rash, are sufficient to distinguish it. Over-certainty is, of course, to be avoided. In more than one instance during the epidemic patients have refused to call in medical assistance, under the impression that they were suffering from Dengue. The disease turned out to be acute lobar pneumonia, and ended fatally.

Mortality.—Davidson says, "Dengue is never directly fatal except in the case of old or otherwise worn-out subjects The few

deaths that occur in patients suffering from Dengue are the result of some anterior or intercurrent affection, rather than of the disease itself." This statement is certainly not true of the North Queensland epidemic under consideration.

I have collected some account of 60 fatal cases occurring in North Queensland during the epidemic of 1897. Half the number were adults. In many pre-existing disease or unfavourable antecedent conditions appeared to determine the fatal issue. Amongst these were old age, diabetes, chronic bronchitis, opium smoking, pregnancy, and especially alcoholism. There is a widespread popular idea that alcohol has a prophylactic influence against the disease, and this, I am sure, acted disastrously at times.

Complications were responsible for three deaths; septic endocarditis, 1; hæmatemesis, 2. In many cases, however, death must be attributed directly to the severity of the disease. Thus at Normanton, in 10 adult fatal cases, the mode of death was by rapid hyperpyrexia and coma in all; and the same applies to many that occurred in Townsville.

It is, however, mainly in considering the mode of death amongst children that Davidson's dictum is found to be at fault. I have some account of at least 30 cases, and in nearly all of these death must be, I think, attributed to the intensity of the uncomplicated disease. Moreover, the manner of death was in the majority almost identical, viz., by rapid heart failure and collapse occurring at the period of crisis. I have seen ten of these myself, two occurring in my own practice, the rest in consultation work. All, so far as I know, were previously healthy children; their ages varied between three and 14 years. In one only did severe convulsions contribute to the result. In all the rest collapse occurred at the crisis on the fifth day of the fever, and death ensued from two to 48 hours later.

These cases are amongst the most startling that occur in medical practice. It not infrequently happens that the child maintains an appearance of well-being, speaking with a loud firm voice, and exhibiting remarkable muscular power and mental clearness, even when the surface of the body is cold, and the pulse has quite disappeared from the wrist. One girl of seven was sitting up in bed and talking quite comfortably half an hour before death. When life is prolonged, however, the patient exhibits all the signs of acute hæmorrhage, a frightful restlessness, jactitation, extreme irritability of temper, and in a few, towards the

end, symptoms of acute mania. It is these latter that have frequently aroused suspicion of meningitis without, however, in my opinion, sufficient cause. In most of the cases profuse sweating occurs at the commencement of the collapse, and this may persist to the end; in others the skin becomes dry. In one there was a dry skin throughout, accompanied with a most profuse critical diarrhœa, terminating in a state exactly resembling the algide stage of cholera. The parents of the child informed Dr. Forrest in this case that for some hours during the night the bowels acted continuously. Vomiting and retching are almost constant concomitants of the collapse.

Although death in these cases is commonly attributed to collapse, yet it does not necessarily follow that the patient dies with a subnormal internal temperature. At the crisis the internal temperature does undoubtedly, in the majority, sink rapidly below the normal, yet later on it not infrequently becomes pyrexial or hyperpyrexial, even while the skin remains quite cold and the pulse is rapidly and steadily failing. The organism has in these cases lost all heat regulating power; the temperature is therefore completely labile and very largely at the mercy of external conditions. Thus a hot bath will rapidly raise the subnormal temperature; similarly a cold bath will quickly reduce hyperpyrexia; in each instance, however, without appreciably improving the pulse or general condition of the patient.

It is not possible to foresee, in any given case, the occurrence of collapse. It is true that in most of those in which it has taken place the disease has been severe throughout, the temperature high with but slight remission, and the patient sunk in a state of somnolence or indifference. In one case, however, the general symptoms had been so mild that the patient had been up and about for the greater part of the attack.

When once collapse has occurred recovery is rare. I have had one case myself, but in that the collapse was not excessive. Dr. Humphry had one recovery out of five, and he adds that he had heard of no others.

It is evident therefore, considering the enormous number of persons attacked, that the case mortality of the disease must be remarkably low, probably below 0.1 per cent. Yet to regard it as nil is incorrect. For obvious reasons the majority of fatal cases are only seen by a medical man when in a hopeless condition.

It has been observed that as epidemic succeeds epidemic, the disease appears to become more severe, and fatal cases more frequent.

Certainly, in Charters Towers, during the first epidemic or two, fatal cases were hardly heard of, while during the last at least 18 occurred. This may be accounted for in part, but only in part, by errors in diagnosis. During the early years men largely depended on the text book descriptions, and believed consequently that death never occurred in the uncomplicated disease. Hence, when death ensued, the physician was led to reconsider his diagnosis, and attribute the result to some other affection. This at any rate occurred to myself in 1894 in a case which I am now sure died by hyperpyrexia in uncomplicated dengue.

Treatment.—Beyond general hygienic measures, such as rest in bed, a fluid diet, mild aperients, &c., there appears to be but little in treatment. Three of my correspondents are emphatic as to the importance of avoiding exposure of the body to cold or draughts, one going to the length of keeping the patient swathed in blankets. They aver that exposure greatly increases the severity of the pains.

It is rational in a complaint that is accompanied with and followed by so much muscular prostration and depression of spirits, to see that all exertion, both physical and mental, is avoided. The widespread popular idea that the fever can be "worked off" by trying to ignore it and taking exercise, is, I am convinced, productive of much harm. I have more than once seen considerable præcordial anxiety, with an intermittent irregular pulse, so induced.

The drugs that have been employed are, as might be anticipated, very various. Quinine has some advocates; alkalies, acetate of ammonia, the mineral acids and opium, sulphonal and morphia, antipyrin, antifebrin, phenacetin, salicine, sodium salicylate, "antikamnia," and stimulants such as alcohol in its various forms, ether and strychnine, have all been used.

Antipyrin undoubtedly relieves the headache in a remarkable manner, and also the other pains in a lesser degree. Antifebrin, phenacetin and "antikamnia" act similarly, though more feebly.

There is a general impression that antipyrin, which has been largely used in this disease by the laity with and without medical advice, has been responsible for the recurrence of fatal collapse. I have been at some trouble to investigate this matter, and I am convinced that it is quite fallacious. Of the 10 cases of fatal collapse that came under my observation, a majority had not had a dose of the drug, the rest having had only minute doses; and Dr. Humphry informs me that certainly four, and

probably all of his five fatal cases, had no antipyrin whatever.

It is of course advisable to avoid large doses of this drug, especially as these are never required. I have been in the habit of prescribing for adults, 10 grains, whenever the symptoms are severe, but never more frequently than once in 8 hours, and this has not been followed by any unpleasant symptom. I have always, however, avoided the drug late on the 4th day, as it is reasonable to think that if given shortly before the crisis collapse might thereby be increased.

Hypnotics are sometimes called for, and Sulphonal has seemed to act well.

Morphia subcutaneously is at times demanded by the severity of the pains, but it is apt to be followed by an exacerbation of the gastric symptoms.

For the retching and vomiting which is so constant a symptom on the 4th and 5th days, I have found nothing effectual except emetics of warm water. The patient is directed to swallow rapidly a pint or more of warm water. This is immediately returned, and the procedure repeated once or twice. A sensation of much epigastric comfort nearly always follows, and lasts for some hours. I have had no success with drugs.

It is of the greatest importance to warn parents of the possibility of collapse, and to instruct them carefully in the management of this condition before it arises. Fortunately it almost always occurs at the same period of the disease, viz., about the end of the 4th day or the beginning of the 5th. The child should then be constantly and carefully watched, not being left for an instant, and the proper remedial measures taken on the first suspicion of a change. I am inclined to think that in this way some of these cases might be saved, but there is never time to await the physician's visit.

The means of combating collapse in dengue do not differ from those which are in use in this condition when otherwise induced. Hot stimulants by the mouth if possible, otherwise by the rectum, with beef tea; external heat in all forms; mustard to the præcordia; hypodermic injections of strychnine and ether have generally been used. Wet packs or the bath have been tried in the hyperpyrexia which follows, but without benefit, so far as I know. Indeed the hyperpyrexia in these cases appears to be paralytic in nature, a consequence more than a cause of the moribund condition.

Intravenous injection of saline fluid was suggested and attempted in one case, but the child

was young and fat, and the vein so collapsed as to be indistinguishable. Hypodermoclysis was practised in another, to the extent of 15 ozs., but without any good result. In the last case I saw, which was accompanied by great restlessness, I administered morphia hypodermically in a considerable dose. During the increased comfort which followed, I was surprised to notice a distinct improvement in the quality of the pulse, an event I had never seen previously in any fatal case. Unfortunately I was unable to follow up the case, which died next day, but I should certainly try the remedy much earlier in a future case. The prognosis of these cases is so hopeless, and the usual remedies so useless, that any new idea offering a chance of success is worth following up.

Nature of the Epidemic.—It is still a moot point with many whether the recent epidemics of fever, which in Queensland are really the same disease as the dengue, which has been known for many years in Burmah, India, the West Indies, Philadelphia, and elsewhere. It is to be noted that the medical men in the North, where the disease began, and who have necessarily had most experience, are, so far as I know, almost unanimous on the point that the two diseases are identical. The Queensland epidemic certainly differs in some important details. Especially is to be noted the almost total absence of swelled joints, of the post-febrile rheumatic stage, and the rarity of complete afebrile intermission. All these do, however, occur more or less rarely, but sufficiently often to prove the identity of the disease. The absence of swelled joints was noticed by Manson, at Amoy, in the epidemics of 1872.

That the disease on the average is shorter in duration is, I believe, due to the comparative infrequency of the period of afebrile intermission. Such intermission has been present as a rule in other epidemics, and has lasted three, or even four more days. It happens, therefore, that while the duration of the disease, as measured from the invasion to the terminal crisis, is perhaps nearly twice as long as in the common North Queensland variety, yet the actual number of pyrexial days is equal or probably less as a rule.

There would seem to be some analogy between dengue and malaria. Both appear in a remittent and an intermittent form. The relative prevalence of each variety in both varies in different countries. In malaria the remittent form is admittedly far more serious and fatal. Similarly the dengue of N. Queensland, which has been mainly remittent, has

apparently been considerably more fatal than the intermittent form described in most textbooks.

In this connection some observations of Dr. Hunt's are of much interest. Dr. Hunt has examined the fresh blood in thirty or forty cases of dengue. He says: "The only fairly constant appearance I have noted has been the presence of bodies so small and so actively mobile as to appear as spinning granules. They occasionally appear to be in or on the corpuscle, but more generally are free in the serum. . . . Similar mobile granules were found in the broth through which the breath of a dengue patient was made to pass." He has also found the same spinning free mobile granules in two cases who had contracted malaria in New Guinea, and who had not, so far as was known, suffered from dengue. Dr. Hunt was unable to make any cultivations, and he is careful to avoid drawing any inferences from his observations.

CLEANING CANADA BALSAM FROM SLIDES—A LABORATORY NOTE.

BY CHARLES MACLAURIN, M.B., C.M. EDIN.,
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THE ordinary way of dissolving Canada balsam from slides, by means of turpentine, is unsatisfactory, inasmuch as it is sometimes difficult afterwards to remove the turpentine, which is insoluble in water. I have for some months used in my own laboratory the following fluid, which has given every satisfaction. I am not aware that it has heretofore been published:—

Turpentine	...	...	...	...	50 parts
Xylol	...	...	...	...	20 "
Phenol	...	...	...	...	10 "
Alcohol (98 per cent.)	...	...	...	...	20 "

Xylol may be substituted for the turpentine, but it is more expensive.

Dissolve the phenol in the xylol, add the alcohol; pour these into the turpentine, and keep in a stoppered jar. Old materials may be used, which have become contaminated and useless for histological work, but the alcohol should not be less than 96 per cent.

To clean slides, leave them in the fluid for a few hours, and then rub them gently with the fingers under a tap. Practically, all the fluid will come away, leaving the slide wet with water, which can be removed with a dry cloth. If further cleaning be required, it may be done in the usual way with alcohol.

Turpentine and xylol are solvents of Canada balsam, and their action appears to be assisted in a remarkable manner by the phenol. The alcohol violently absorbs water during washing, bursting the greasy molecules of turpentine, &c., from their hold on the glass, so that the whole fluid is swept away in the stream.

The cleaning fluid must not be allowed to evaporate on the hands, or the phenol may injure the skin.

SECONDARY LAPAROTOMY FOR OVARIAN TUMOR.

By C. GRAHAM CAMPBELL, M.B., M.S. EDIN.
CHRISTCHURCH.

(READ BEFORE THE CANTERBURY SECTION, NEW ZEALAND BRANCH, B.M.A.)

I wish to bring before you a few notes on a case of secondary laparotomy, as showing some of the difficulties one is liable to meet with under similar circumstances.

M. A., aged 45, married 25 years. Two children, 24 and 23 years of age.

Had no miscarriages.

Has been ill six years.

Four and a half years ago had an ovarian tumor removed by Dr. Lawson Tait after being confined to bed for eighteen months.

Menstruation has always been regular till the present year, during which time she has only been unwell twice, once in June and once in December. She complained slightly of hot and cold flushes, indicating probably the advent of the menopause.

Her confinements were both instrumental, and she had some inflammation after the last.

She has some pain in the left side while passing water, and this function is somewhat erratic, as sometimes she passes very little, while at others she makes a normal quantity.

She complains chiefly of pain in the left side, worse when standing, and a burning and dragging pain in the seat of the abdominal scar.

She sleeps badly, her appetite is capricious, the bowels have a tendency to be loose, and the motions are accompanied with acute abdominal pain.

She is very nervous, and has repeated attacks of retching.

On examination one finds a laceration of both the perineum and cervix.

The uterus is subinvolved, lying forward, but with a slight lateral deviation. Traction on, or elevation of, the uterus gives intense pain. There is a mass in the left groin about

the size of an orange, which gives indefinite signs of fluctuation. It is perfectly immovable.

There is also a mass in the posterior fornix which seems continuous with that in the left side, but there is no sign of fluctuation.

Diagnosis.

Left ovarian tumor, with adhesions between the uterus and bowel and the abdominal wall.

Operation.

In the line of the old scar and about the middle there is a deep depression, the site of the drainage-tube used in the previous operation.

The incision was made in the middle line, and the depression above mentioned was cut out. After entering the peritoneal cavity, it was found that the omentum was closely adherent to the peritoneum. In the centre of the incision the omentum had been rolled in, forming a tube which would admit the forefinger, and at the bottom of which the fundus of the uterus could be felt, with the omentum closely adherent to it. This was evidently the track of the drainage tube, and clearly indicates how nature provides for the exclusion of such foreign objects from the general peritoneal cavity.

After separating the omentum from its attachments to the abdominal wall, it was followed down to the fundus of the uterus and into Douglas' pouch, to both of which it was adherent, as well as to about eight inches of small intestine.

It also formed the upper and posterior boundaries of the tumor, from all of which structures it was eventually separated, but at the expense of much time.

The tumor was then gradually shelled out, but not without rupturing it, and the pedicle was treated with the Baker-Brown clamp and the actual cautery.

A large piece of the omentum was removed, as leaving it would only have given rise to fresh adhesions.

The abdominal wound was closed with silk sutures, and the patient returned to bed in good condition, after an operation lasting two hours and thirty-five minutes.

There is nothing to relate of the after history, as the patient has made an uninterrupted recovery, her temperature never going above 99° except on one occasion, due to some flatulent distension.

Treatment, November 11th, notices "A Case of Traumatic Epilepsy Cured by Trephining," appearing in the *Australasian Medical Gazette*, May, 1897, by Dr. Philip James, of Wellington, New Zealand.

ASEPTIC MIDWIFERY.

By R. ARTHUR, M.A., M.D., MOSMAN, SYDNEY.

THE days of antiseptic surgery are past. The steam spray spits and hisses no longer in the operating room, nor does the surgeon devitalise his wounds by pouring strong antiseptic solutions over them. He enters more and more into the Promised Land of asepsis, and performs feats which his predecessor did not allow himself even to imagine.

But the obstetrician lags sadly behind. He has not yet come to realise that parturition is a surgical operation which nature is constantly performing. One might regard the process as the enucleation of a tumour with the accompanying risks of shock, hæmorrhage, and sepsis. As nature has been doing this for a good many years now, she has arrived at no mean efficiency in it. There is no doubt but that natural selection has minimised the dangers of shock and hæmorrhage, and has conferred a high degree of immunity against septic infection. But in these latter days man has come in and insisted upon aiding nature in this business; and, on the whole, he has made a very bad assistant. The most serious offence charged to his account is that by his meddling he has introduced pathogenic organisms into the uterus which nature hardly, if ever, allowed to pass the vulva. The consequences are sepsis in all its immediate varieties, from endometritis, pelvic cellulitis, and phlegmasia dolens to the malignant forms of septicæmia and pyæmia, or the delayed results in the shape of chronic endometritis, salpingitis, and ovarian inflammations. It may truly be said that the major part of pelvic troubles in the female are due to bacterial infection, and that much of this is caused by the well-meant, but unfortunate interference of the assistants at child-birth or abortion.

The day is gone when we could gain consolation and cheat remorse by the comfortable doctrine of autogenetic infection. Here at least is true the contrary of the saying that not that which goeth in but that which cometh out defileth. For what are the dangers to which the average healthy pregnant woman is exposed? Her pelvis is normal, the odds are 200 to 1 that the head or breech presents, and more than 1,000 to 1 against placenta prævia. What then shall she fear? She shall fear chiefly the streptococcus pyogenes and the staphylococcus pyogenes aureus, and, to a less degree, the bacillus coli and the coccus of erysipelas. I omit the gonococcus, because it

probably produces its results independent of parturition, or at least by itself does not set up general systemic infection.

If she were left to herself, the risk from any of these micro-organisms would be very small. It has been proved that the acid secretion of the vagina is quite capable of dealing with any stray intruders which may penetrate from the vulva. But the case is altered when a culture of one of these bacteria, of more or less virulence, is introduced on a finger or a vaginal tube, and inoculated into a laceration in the expanding cervix. Even here the phagocytes are able to cope with the invaders in the majority of cases. When they fail, the various forms of septic infection result.

The bearing of all this is obvious. The chief duty of the obstetrician is to guard the vulva. Through its portals must pass no pathogenic germs. If he do this effectually, much else may be forgiven him by Nature. But the responsibility for an aseptic labour rests on him, and on him alone. I say this advisedly. There are doubtlessly other sources of infection, and the medical man may be perfectly innocent. It is said that an insanitary lying-in room may be the cause of infection, though I am inclined to doubt this. The most real and imminent danger is the "monthly nurse." This worthy woman has been the ruin of many a rising doctor's reputation. She has worked the mischief, and he has got the blame. Nevertheless, it has been his own fault. Let it be laid down as a canon of midwifery that the doctor is responsible not only for himself, but for the nurse, and for anything which may tend to produce sepsis. If he seem to have to suffer vicariously for the shortcomings of others, the reply is that he should have prevented these shortcomings.

If the nurse be of the "Gamp" type—and this species is by no means extinct yet—the outlook is disquieting. It is strange that many women object strongly to the trained nurse, who is said to give herself airs and require the attention of several domestics, and prefer what they call a "motherly person," with black-rimmed nails and an ancient stuff dress, the witness of a hundred births.

This "person," whose qualifications usually are that she has had a dozen children herself and is in needy circumstances, mostly insists on making vaginal examinations, however vehemently she be ordered not to do so. If she cannot be got rid of, the physician must just trust in Providence, and try to mitigate somewhat her possibilities for evil. This can be done by warning the patient not to allow the nurse on

any pretext whatever to examine her, by insisting on the nurse wearing a washing dress, and by standing over her while she cuts her nails and scrubs her hands. But even the trained nurses require watching. Some of them have rather a fondness for P.V.'s on their own account, and, unless they get explicit directions to the contrary, they are prone to give vaginal injections if they think the need arise.

The wisest thing is for the doctor to insist upon being allowed to choose the nurse, or otherwise refuse responsibility. This granted, he can select one who he knows will carry out strictly his instructions. Neither less nor more.

It is well also to inspect the room where the lying-in is to take place, and if it is ill-ventilated, or insanitary, a change to another room can be ordered.

The instructions to the nurse as to what she must do when labour sets in should be written or printed, or some of them will most certainly be overlooked. To begin with, the nurse's dress and hands must be like Caesar's wife as regards septic matter. The dress must be of washing material, and the hands scrubbed for five minutes with a nail brush. Only then is the nurse in a position to attend to the patient.

Firstly, then, the bowels must be emptied by a large warm water enema. It is no use trusting to the patient's statement that the bowels have moved freely. If one relies on this, it will constantly happen that the advancing head proves that this is not so, and much unpleasantness and the possibility of infection by the bacillus coli result. In fact, it is often well to give a second enema during the progress of the labour. In passing, I may record an observation of mine, that the average nurse, when removing discharges from the vulva, almost invariably wipes from the anus forward, with the chance of smearing the vulva with some of the mucus which exudes from the bowel.

After this, the nurse should cut away the hair round the vulva. This may seem a work of supererogation, but I think not. The parts can neither be disinfected before labour, nor kept clean afterwards, if there is a quantity of thick matted hair around the vulvar orifice.

Then a warm bath, during which the patient should be told to wash the external genital thoroughly with soap. After the bath a pad of cotton wool soaked in an antiseptic solution should be applied to the vulva, and kept in place by a napkin attached to an abdominal belt. And when the nurse has put clean clothes on the patient, and clean linen on the bed, her active duties are over.

When the medical attendant arrives, and here I would insist on the advisability of his also wearing clothes that can be washed, the question arises—Should he make a vaginal examination? It is recognised that the fewer he makes the better. The position of the child can very readily be detected by palpation, but this is not all that needs to be known.

In the first case in which, fired by a paper of Dr. Camac Wilkinson's at the Congress in Sydney, I determined to rely on the external method alone, there was seemingly no progress for several hours, and when at last I was compelled to examine, I found the swollen anterior lip of the cervix impeding further advance. After this was pushed up, the labour soon terminated. But apart from accidents like this, a vaginal examination is necessary. We cannot afford to squat in an armchair with *J'y suis J'y reste* till everything is over. And the protestations of the patient are a poor criterion of the stage of labour. She may be demanding chloroform till it is over, and an examination shows that it has hardly begun, and that the obstetrician's duty is to go home to bed.

When an examination is made, the hands should be rendered aseptic as in a surgical operation. This involves a prolonged use of the nail brush, and the steeping of the hands for several minutes in a strong antiseptic fluid. No lubricant should be used. The vulva should be washed with an antiseptic. The examining hand ought not to be introduced under the bedclothes—as the older midwifery books direct. It is necessary to see where it is going, and what touching. An aseptic hand is better than the avoidance of "offences to modesty" which the text-books harp on.

After the examination, the antiseptic pad should be reapplied.

The question of vaginal injections seems now to be settled in favour of their abolition.

The arguments formerly used in their support were:—

1. That they disinfected the vagina. But now it has been proved that the healthy vagina contains no pathogenic germs.
2. That they washed out any organisms which might have been introduced. But the whole aim of the obstetrician should be to prevent the entrance of such organisms.

And if an open surface on the cervix has been infected by the examining finger, it is questionable if a douche, though given immediately after, will do anything to negative the infection. And further, the vaginal tube is always a possible introducer of infection. For

this reason, when douches are necessary, they should always be given by the medical attendant himself, using a sterilized tube.

When labour is over, any tear in the perineum, however small, should be sewn up. A search should also be made for minute fissures about the vulvar orifice, and, if any are present, they should be sealed up with iodine, and covered with iodoform. After the vulva is well cleansed with a warm antiseptic solution, it should be powdered with boracic acid, and an antiseptic pad applied. The nurse should be instructed to change the pad every three hours, and to wash the vulva three or four times a day, using antiseptic cotton wool instead of a sponge.

A question of great moment is—Should a medical man who is attending an infective case take charge of a confinement? Till a few years ago, the answer would have been emphatically in the negative. This was based on the dread of some miasma which the doctor was vaguely supposed to carry about with him, and which it took weeks or months to get rid of. But fuller knowledge has shown what the danger really is, and how it is to be avoided. It is that the hands, and perhaps the clothes, become infected with a virulent culture of some pathogenic germ. Dr. Rutter, of Philadelphia, is immortalised as a "walking pestilence." Not because he had ozæna, but because, in popular parlance, he picked his nose. "Time does not destroy septic dirt," but hot water and antiseptics do.

Still, a medical man will often have a lurking fear that the disinfection of his hands has not been sufficiently thorough, and in these cases I would suggest the use of a pair of the thin indiarubber gloves that can be obtained now. No great delicacy of touch is required in a vaginal examination, and the gloves, which can be rendered perfectly aseptic, will obviate any possibility of infection.

It may be urged that all these refinements are uncalled for and burdensome, and that cases get on well with ordinary antiseptic precautions.

This may be true, but they get on better with the methods suggested. Many men—and good men, too—laughed at antiseptics, and good antiseptic surgeons laughed at asepsis, but laughter does not stem the progress of scientific truth.

The medical man's duty is to do the very best for his patient, and, from the merely selfish point of view, the avoidance of the long-drawn miseries of a "puerperal" case amply compensates for a little extra trouble.

An aseptic labour will mean a puerperium

with a normal temperature, instead of those rises to 100° or 100·5°, which are explained as "milk fever," constipation, mental excitement, &c, but which are really due to slight septic absorption. Everything seems right in a day or two, but the organisms have effected a lodgment, and may produce disaster later on. So let us be as the Pharisees at least in this—in the much washing of hands and cleansing of the outward parts.

ABSCCESS OF THYROID COMPLICATING PLEURISY.

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WAIMATE, N.Z., AND MARGARET B.
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THE rarity of abscess of the thyroid gland as a complication of septic disease is our excuse for sending you a brief jotting of a case that lately came under our notice. The swelling of the gland in this case never caused us to seriously consider the probability of suppuration, and as there may be others to whom a purulent thyroid is a *rara avis*, little harm can be done by drawing attention to it.

The patient in this case was a tall, well-built man 37 years of age, who came in from the country, and presented symptoms of dyspnoea, with high temperature. At the first examination a goitrous neck was noticed, but it did not call for special attention. The physical signs were almost *nil*. He had great pain in the right lower chest, aggravated by a deep breath. No friction sounds were audible, and the dulness was but slightly marked, and there were no crepitations, while the patient's sufferings seemed out of proportion to the discoverable signs. He was put to bed, but there he could get no sleep, morphia, indeed, giving him but little rest, and under no circumstances would he lie down. Orthopnoea was very marked. Poultices were applied with no relief, and then his chest was strapped, and this eased the pain, which was otherwise constant. On the morning of the third day he got *suddenly* worse. Difficulty in breathing became extreme; he was cyanosed, perspiration poured off his face, and his hands were blue; pulse very feeble and rapid, while a swelling on the left side of the neck the size of a fist and well defined, and connected with the thyroid (as judged by deglutition), had appeared in the course of an hour, the superficial veins being markedly distended. He seemed practically moribund. Examination of chest revealed air

entering freely except at the right extreme base. This condition lasted seven hours, when the cyanosis and swelling began to decrease together, and he was free from pain during and after this attack, and his temperature remained sub-normal. The next day he was comparatively well, but the following night he was seized with pain in the left lower chest. A few crepitations were heard at one spot about the left nipple, slight comparative dulness, and no friction sounds.

On the third day of this attack some swellings of the thyroid occurred, but not nearly so marked as previously, and though his pulse was watched half-hourly all night, he collapsed suddenly, and died in the course of half-an-hour. Nitro-glycerine, strychnine, digitalin, opening the external jugular, and artificial respiration were resorted to, but all our efforts failed.

A *post-mortem* examination made the second day after death revealed generalised pleurisy over both lungs—dense adhesion in some parts—but most of the pleura was covered with yellow chamois-leather-like lymph in a thick layer. This applies to both sides of the chest. At the lower part of the right cavity, covered in by surrounding adhesions, was a pocket of pus containing about 3i. to 3ii. in all. This was the site of the constant severe pain. The thyroid was greatly enlarged, one side of it being diffuent and verging on pus, the other side being represented by an abscess sac, from which fluid spurted on section. The pus contained streptococci in abundance, but diplococci were not to be seen.

There was nothing in the man's heredity of any consequence, but he said he had been seized with severe pains in the chest at harvest time, six or seven months before, and had never been well since; and a visit for an examination and an opinion was constantly postponed, though thought necessary by himself and his wife. The latter also states that he could never wear an ordinary bought collar, his neck being too large.

During the absence of one of us, Dr. Cruickshank had the benefit of consultation with Dr. Hodges (at the time of the first serious attack), and Dr. Hayes, of Temuka, assisted as a visitor at the *post-mortem*.

Idiopathic thyroiditis is, if it exists, an extremely rare disease, and even metastatic deposits are uncommon. Our case represents, however, what has been observed before, that a previously-diseased gland is the most prone to suppuration. The orthopnoea, which was so marked a feature, was due in all probability to the enlarged thyroid. "Patients

have instinctively to maintain the head in such a position to avoid this occurrence," namely, sudden fatal dyspnoea as the result of goitre.

Acute inflammation of the gland has been attributed to cold, trauma, and rheumatism, but in the great majority of cases it is due to some infection—more particularly smallpox, enteric and typhus fevers. Strumitis, or inflammation of the goitrous gland (such as the case before us) is very rarely primary, being generally metastatic. (Osler, in Pepper's "System of Medicine.")

Bowlby says that inflammation of the gland "occasionally terminates in the formation of pus."

Almost all the cases on record are secondary, including most of Havel's, which embrace cases after practically all the specific diseases. Erichsen (ninth edition) refers to cases being generally due to pyæmic infection and to the rapid swelling that may occur, which threatens suffocation. The pus in this case, developed only in one lobe, was deeply seated, and external examination of the gland failed to suggest to any of us a sense of fluctuation, and there was no heat nor redness of the neighbourhood. Thornton speaks of cases following typhus, puerperal fever, and pyæmia, also bronchitis and pneumonia.

In this particular case we have metastatic abscesses, in a previously-enlarged gland, due to septic absorption from a small purulent focus in the right pleura. In the light of the history of the case it is probable that this focus had existed for some months previous, and it is only too probable that the patient had thyroiditis when we first saw him. The temperature was not characteristic of septicæmia, and the pleuræ contained no fluid worth mentioning, thus justifying the decision come to at the consultation that needle puncture was not indicated by the physical signs.

The sudden increase in size of the thyroid—in the course of half-an-hour—causing urgent symptoms, was somewhat puzzling. Our view was that it was a circulatory change such as hyperæmia or a hæmorrhage into a cyst.

"The cystic form of goitre is liable to sudden enlargement from intra-cystic hæmorrhage or inflammatory engorgement, or from rupture of a cyst." (Pitts, in "Treves' System.")

"It is not sufficiently recognised by the profession that a bronchocele, whether moderate in size or large, may from some sudden engorgement or rupture cause urgent and fatal dyspnoea," says Jacobson. He quotes the case of a woman who during labour was attacked by the dyspnoea due to goitre, and died; of

another woman who suddenly awoke from sleep and seeing her child playing with a lighted stick was so frightened that urgent dyspnoea from a goitre she had set in, with a fatal result. The same author quotes a case of his own where the gland increased greatly in size during singing, and was due to extravasation of blood into an adenoma.

To recapitulate very shortly this interesting case. It was a pyemia from a purulent pleuritic focus, and the thyroid was the seat of engorgement ultimately of abscess formation. The soft lymph covering both pleura led to an absence of the pleuritic friction sounds. The septic condition gave rise to the urgent appearance of the patient, with very little lung signs; the inability to lie down was the result of the swollen thyroid, which pressed on the trachea, the alarming dyspnoea on one occasion was due either to this pressure (probably so from the concomitant enlargement) or to pressure on the laryngeal nerves setting up reflex spasm. No blood extravasations were found *post-mortem*. Possibly the sudden well-defined enlargement was due to the bursting of a pus cavity towards the surface. There was no evidence of any pneumonia either at the *post-mortem*.

All of us who saw this case felt there was some unthought-of factor at work in connection with it, and unfortunately we had the opportunity of discovering it.

This case is only another illustration of the fact that it is unwise to take the explanation of any physical condition or symptom of disease for granted, and we trust that drawing attention to the case will not be altogether unprofitable. Thus do we learn from our mistakes.

CASE OF RAPIDLY-SPREADING GANGRENE OF BOTH LEGS.

BY JAMES GREGG, M.A., M.B., EX-SCHOLAR
AND MODERATOR T.C.D., HILLSTON, N.S.W.

T. D., a man of 54 years of age, applied for treatment under the following circumstances:—He was a carrier, and had left Hillston on Tuesday, the 1st of February. On Wednesday he was engaged in cleaning out some water tanks at a distance of about 50 miles from Hillston, and during that day drank a large amount of bad water. Feeling unwell, he resolved to return to Hillston, and rode home during Thursday and Friday, resting on the way, and suffering all the time from diarrhoea,

vomiting, and pains in the abdomen. On Saturday, when I saw him about 11 a.m., he was on horseback, but appeared much exhausted, and said that if he got off the horse he would be unable to get on again. He was at once put to bed, and allowed sodawater, milk, and brandy, small doses of morphia being also given. The vomiting and abdominal pain ceased during Saturday, but the diarrhoea still continued. On Saturday and Sunday morning his temperature was normal. He seemed to be somewhat better on Sunday; the diarrhoea was less, only four motions during the twelve hours. There was no pain or vomiting. The motions were brown and of pea-soup consistence, not unhealthy looking. He had evidently been a strong man, but was at present rather thin. Was almost a total abstainer from alcohol. On Sunday evening (8 p.m.) the temperature was 102° F., and on Monday morning, about 5 a.m., he had a rigor. At 7 a.m. when I saw him he was evidently much worse, very restless and delirious; temperature 104°, pulse more rapid and feeble. He complained of great pain in both shins. On examination there was slight swelling over the tibia about half way up each leg, very slight discoloration, and on pressure crepitation could just be made out. I saw him again after four hours, at 11 a.m. He was then in a state of collapse, deadly pale, the forehead cold and covered with clammy sweat, pulse rapid, almost imperceptible. The right leg was now enormously swelled from the toes up to Poupart's ligament, the skin tense and shiny, not pitting on pressure, but crepitating all over in the most marked fashion, the subcutaneous tissues being evidently full of gas; the colour was dark red, the toes being almost purple. There were no vesicles on the skin. The left leg was only slightly discoloured; the swelling slight, not extending above the knee, the foot not much affected; crepitation, however, was well marked, particularly over the tibia. I watched the patient for about an hour, till noon. Saw him again in the afternoon at 3 p.m. He was now moribund, and died about 3.30 p.m. The right leg was in much the same state as before, but covered with large bullæ as big as an egg, containing blood-stained serum. The gangrenous process had extended up the right side, nearly as far as the axilla, the whole right side being of a dark red colour, swelled, and crepitating on pressure. The scrotum was greatly swelled. On the left side the process had not extended with the same rapidity. The left leg was swelled a little above the knee, somewhat discoloured, and crepitating on pressure. I was unable to observe the body after

death, but am told that the process continued to spread rapidly, the head and body being swelled at 9 p.m., when the coffin was screwed down.

The case appears to me of interest from the rapid spread of the process, and the fact that it began in both legs simultaneously. Spreading, or traumatic, grangrene is generally supposed to be due to local infection. I examined the body to see if there was any chafing from the saddle, but could find none. It was not possible, however, to make as thorough an examination as might be wished. Could infection have proceeded from the intestine?

PEMPHIGUS CONTAGIOSUS TROPICUS.

BY THE REV. HUNTER FINLAY, M.D.,
TOWNSVILLE, Q.

IN the tropics of North Queensland, as in all other warm climates, particularly during the wet season, nearly everyone is more or less troubled with *lichen tropicus*, or prickly heat, and this is at times of so troublesome a character that I think it would be a great blessing if someone could devise a safe and expeditious cure for it. Many of the so-called cures at present in use appear to be utterly valueless, while some of them absolutely aggravate the discomfort the disease causes.

Another disease we find exceedingly prevalent in these parts during the hot weather, particularly among children, is popularly known as "native pock," and, as this trouble generally appears coincidentally with the ripening of the mangoes, I find that many persons are under the impression that it is caused by the juice of this delicious fruit. This idea is, however, in my opinion, quite erroneous, my belief being that, so far from being injurious, the mango is one of the best and most cooling fruits that sufferers from the disease I am now considering can partake of. During my seventeen years' residence in North Queensland, I have seen many cases of this disease each season, but, as most cases are already beyond the stage at which identification is possible before medical advice is sought, I have not till this season been able to watch cases from their earliest stages. Now, however, I am in a position to define the trouble as *Pemphigus Contagiosus Tropicus*. In the majority of the cases the disease commences with one or two blebs containing clear serum very much like chicken pox, and, indeed, I have in some instances found, when I first saw the patient, such a crop

of clear bullæ on the back, as to make one imagine I had a case of *varicella* to deal with, but for the fact that there is no increase of temperature and the crop is not so distributed over the body as it generally is in chicken pox. There is great irritation of the skin at the seat of the blebs, which would usually dry up if left to themselves; but the burning and itching is generally so severe that the patient cannot avoid scratching the affected parts. In this way most of the bullæ are burst, and the escaping fluid is capable of spreading the disease, not only on other parts of the patient first affected, but to other children, and frequently also to adults—such, for example, as the parents who may be brought in close contact with children suffering from the disease. After the bullæ rupture an areola of inflammation spreads around each, and, if no means have been used to stay or cure the disease, the patient soon becomes unsightly—in fact, full of sores.

As to treatment, the indications are to give saline aperients, and, if there be much inflammation of the areolæ, use a lotion of one part Liq. Plumbi Subacet. to seven of distilled or rain water. Till quite recently, this disease was not considered contagious, but I have found abundant proof that it is so; consequently, it is well to use some disinfecting ointment freely, alike to prevent the trouble from spreading either further on the patient already affected, or to others. For children, I recommend the following ointment:—

R Pulv. Acetanelid.
Hydg. Subchlorid, a.a. gr. v.
Vaselin. Alb., ʒi. m.
Ft. Unguentum.

Sig. To be applied to the affected parts morning and evening.

This allays the heat and itching, prevents the necessity for scratching, and at the same time disinfects the parts. For adults, I make the ointment double the above strength. I may remark, in conclusion, that, though this disease is exceedingly disagreeable, it is not in any case fatal.

NEW SOUTH WALES MEDICAL UNION.

THE Fifth Annual Meeting of the members of the N.S.W. Medical Union will take place at the Editor's Library, 121 Bathurst-street, Sydney, on Wednesday, March 30th, at 8.30 p.m. The business will be the reception of the Annual Report and Treasurer's Statement and the election of office-bearers for 1898-99.

Treatment of July 8th, 1897, contains extracts and comments on an article on "Fourteen Cases of Acute Anterior Poliomyelitis," contributed to the *Australasian Medical Gazette* for April 21th, 1897, by Dr. C. A. Altmann, of Port Lincoln, S. Australia.

THE C.D. ACT IN NEW ZEALAND.

BY ROBERT FULTON, M.B., C.M. EDIN.,
DUNEDIN.

READ BEFORE THE OTAGO SECTION OF THE NEW
ZEALAND BRANCH OF THE BRITISH MEDICAL
ASSOCIATION, NOVEMBER 2ND. 1897.

(Continued from p. 72, February issue A.M.G.)

DR. WOLVERSTON, late House Surgeon of the Royal Hospital, Devonport, says that before the enactment of the Contagious Diseases Act it was rarely indeed that he saw a bad case of the disease. What more do we want than such evidence as this which springs up on every hand? If the Act were beneficial it ought not to be made optional at all, it should be made compulsory. The Act was not now in operation, so that surely the wisest thing to be done would be to abolish it altogether—to wipe it off the statute-book as a thing which had been put there in error, and which it was better they should forget. But if it be deemed that it should remain on the statute-book why should it not be made to apply to men as well as to women? In reading on this question he had ascertained beyond a doubt that the disease was spread more by men than by women. He, therefore, thought it very unfair that man, in his moral cowardice, should make a law of this kind in order to protect him from the results of his own indiscretions. He had said before, and had been contradicted by the Hon Sir G. S. Whitmore, that neither England nor India had kept this detestable thing on the Statute-Book. They had not done so. They had not kept it dangling before the eyes of the people as a supposed deterrent; they had erased it as a blot and a blunder which they were very glad to get rid of, and they tried to forget that they had ever made such a mistake. What he had read that day had proved that this was the feeling in Great Britain and in India.

He was very glad that he had read up on this question, for he found that it was no longer considered necessary, in order to protect men, and women, too, from the results of their evil courses, that the women should be treated as cattle, whilst the other party to the transaction was dealt with the deference due to a gentleman. With all our vaunted Christianity, so long as this Act remained on the statute book he thought we degraded ourselves, we grovelled in the dirt, and sank lower than the savage, and proved beyond dispute that our civilisation had been a failure. What was wanted, as had been pointed out, were moral, not brutal ex-

pedients. He had a few more extracts which he should read on the subject. They were very short and very interesting. It is said that women, under the system, are blackmailed and terrorised; so much so that Parsees in India and Buddhists in China have defied the Christian English to put the examination in force. Dr. Mireur, of Marseilles, an eminent authority, says:—

“The system of registration which regulates and legalises the sorrowful industry of the prostitute is, in fact, the sinister stroke by which women are cut off from society, and after which they no longer belong to themselves; they are cut off not only from society, but from Heaven, from hope, and from the power to repent.”

This was not the evidence of a sentimental reformer, but of a hard, matter-of-fact medical man, who had had very considerable experience in regard to this painful subject. Professor Newman also remarked:—

“Examination is a violation of the person, an intrinsic wickedness, an indefeasible atrocity. Legislation is desecrated, Parliament is dishonoured, resistance becomes nature's own command when such things are enacted.”

From what he understood, the Act appeared to be a licence to commit fornication, and the State that encouraged such an Act was guilty of a grave crime. The opinions and statements he had quoted showed that this really was the case. Dr. Mireur, whom he had previously quoted, exclaimed:—

“Oh, that the whole body of society would, above all, draw a profitable lesson from the afflicting spectacle! Oh, that it would touch with its finger this plague, which is its disgrace, and which demands, as its only remedy, a general reformation of morals!”

And John Stuart Mill, who was, he thought it would be admitted, a cold calculating person, not likely to be led away by any sentiment, said:—

“It is no part of the business of the Government to provide security beforehand against immoralities of any kind.”

Hon. gentlemen would surely accept such testimony. But let them see what took place in Christian England when the law was in full blast. The Right Honorable Mr. Stansfield says:—

“A Mrs. Percy, at Aldershot, who was a professional singer, was called upon by the officers to sign the voluntary submission form. She refused. They denounced her at every music hall where she obtained employment, and intimidated the proprietor by threatening

to oppose the renewal of his licence. Her means of livelihood had been taken away. She had to choose between starvation, submission, or suicide. She preferred the last, and drowned herself."

The right hon. gentleman adds :—

"That such coercion was not the result of excess of zeal on the part of subordinates is proved by the official instruction (*vide* report of the Royal Commission) to inform the women who refused to submit voluntarily of the penalties beyond these official persecutions."

Again, Mr. Shaw-Lefevre, when he was Secretary to the Admiralty, said :—

"I believe that the longer these Acts are tried the more complete and signal will be their failure. They have more than failed; they have resulted in a positive increase of the disease they were intended to cure."

Those who admire the Continental system will be surprised to learn that the Chief of Police confesses that out of 30,000 to 50,000 prostitutes in Paris only one-tenth can be got on the register, and that out of 30,000 in Berlin only 2000 are on the register. In Auckland only 38 out of 300 were on the register. Professor Andrews, an eminent American surgeon, testifies that :—

"Probably four-fifths of all the sexual diseases in men are derived, not directly from women, but from the virus of diseased men." He adds that :—"It is a matter of utter astonishment that any surgeon of common sense should suppose that a medical examination can give the least security." Such was the testimony of educated medical men and others. Dr. Taylor summed up by saying :—

"And now, what ought to be done to diminish the disease? Simply the establishment of hospitals and dispensaries really accessible to all classes."

All this testimony went to show that those who were trusting to the Contagious Diseases Act were living in a fool's paradise. It is said that this agitation has been got up by some old ladies. Well, old ladies were very good, especially if they happen to be our mothers. Really he did not know, and could not see, why old ladies should be spoken of in a sneering way. Surely old ladies were better judges of this sort of thing than were men. The hon. gentleman also mentioned that the police stated that the effect of the operation of this bill was to decrease prostitution and to keep girls off the street. Well, he hoped it would not be necessary that they should have a bill of this kind in order to keep girls off the street. In order to do that he hoped it would not be necessary that

women who had debased themselves should be still further debased by the exercise of the kind of power which was given under the Contagious Diseases Act.

These are the main arguments in favour of repeal, and against all these there are some excellent speeches on the other side—speeches studiously moderate in tone, and convincing in their statistics. It is hardly necessary for me to quote much from them—the points are well understood—but I will give a separate page showing the result of the voting in different years, both in House and Legislative Council. Inspection of the division lists will show that a large number of hon. members had read a good deal on the subject, and that in every case a considerable majority were thoroughly convinced of the efficacy of the Acts, and the great necessity for not only refusing repeal, but really asking for strict and universal enforcement.

RESULTS OF DIVISIONS IN N.Z. HOUSE OF PARLIAMENT.

Contagious Diseases Act, 1869 : Repeal, by Sir G. Grey, was given on 2nd reading (six months), May 5, 1887, Vol. 57, p. 114. Debate, see "Hansard" of 1887, May 5 56 to 15
Ditto, 2nd Session of 1887 : Second reading negatived November 10, 1887. Debate, see Vol. 58 "Hansard," p. 299, *et seq.* 52 to 26
Ditto, 1888 : 2nd reading negatived May 31, 1888. See "Hansard," Vol. 60, p. 388 ; also p. 416 42 to 29
Also Vol. 61, p. 113 and p. 456 41 to 30
Ditto, 1889 : 1st reading June 28, 1889, and then Bill lapsed.
Ditto 1890 : 1st reading June 20, 1890, and then Bill lapsed.
1891 : No Bill.
1892 and 1893 : No Bill.
1894 : Bill introduced by Button, but the order for the 2nd reading was discharged September 25, 1894.
1895 : Bill introduced by Button discharged July 4.
1895 : Bill introduced by Seddon appears to have passed the House without debate, but in the Legislative Council was thrown out by 20 to 11
For debate in L.C. see "Hansard," Vol. 88, pp. 218 and 273.
1896 : C.D. Act Repeal introduced by Hall Jones. 2nd reading June 23 ; 3rd reading June 23. Lapsed in L.C. Debate, see "Hansard," Vol. 92, p. 259, and for L.C. p. 323. Was thrown out by 20 to 11
1896 : C.D. Act Amendment Bill, by Hall Jones. 2nd reading July 24 ; 3rd reading August 13. Lapsed in L.C. Debate, "Hansard," Vol. 93, p. 465 ; and Vol. 94, p. 319 ; and for L.C., p. 527. Was thrown out by 18 to 11

The following were amongst the arguments from speeches of members of the House in favour of the working of the Act :—

It has been repeatedly shown that the police reports have proved its benefits.

It has a restraining influence on thoughtless girls exposed to the dangers of urban life. Brings fallen women within the sphere of moral and remedial influences.

People are enraged at the fact that the disease is not stamped out by the Act; but who for a moment imagined that it would be? If it brings some small measure of relief, some alleviation of the enormous amount of suffering; if it narrows it down to even a small extent, it is very beneficial.

The Act in Christchurch very nearly stamped out the disease altogether. The reasons for failure of the Act in Paris were that it was put into the hands of the most degraded instead of the very best and most pure-minded police officers.

The Act does not go far enough, but if properly administered with specially chosen officers, and applied in the most stringent manner to both sexes, and enforced universally, would be certainly beneficial.

The results have not been what were expected, but have still been productive of great good.

Let us deal with it like we do smallpox. . . .

But it has not stamped out the disease. It was passed for the purpose of an evil which carries its effects for three generations.

Again, what harm does it do? The outrage of examination. What is the outrage to a class of women who have fallen from the high state of womanhood to be degraded outcasts of society. It was an outrage upon womanhood, they said, to oblige these women, who were quite ready to abandon their persons for a shilling to any dirty larrikin who was willing to pay them the money, to submit to instrumental examination with a view to prevent the spread of disease fatal to life and health. Why, at this day there was no rank in life in which some woman did not voluntarily subject herself to the same kind of examination for the purposes of diagnosis and proper treatment for maladies not of a contagious character, but which were incidental and peculiar to the sex.

Taking a few statistics from the last edition of "Parkes' Practical Hygiene," we find it stated:—

"It has been proposed to detect and cure disease in prostitutes. A great outcry has been raised against this proposal, which is yet a matter of precaution which the State is surely bound to take. A woman chooses to follow a dangerous trade—as dangerous as if she stood at the corner of a street exploding gunpowder. By practising this trade she ought at once to bring herself under the law. . . . It is no more interference with the liberty of the subject to prevent a woman from propagating syphilis than it would be to prevent her propagating smallpox."

The following figures, from the A.M.D. report for 1882, are significant. (Gonorrhoea statistics are omitted, although just as convincing, as this disease was not touched by the Act):—

In 1864 (the year before the Act) the average admissions at all stations from primary venereal sore were, per 1,000 of strength . . . 108.6
In 1872 (at the *uncontrolled* stations) the admissions were, per 1,000 of strength . . . 123.2
In 1872 (at the *controlled* stations) the admissions were, per 1,000 of strength . . . 53.3

Therefore, the gain to the State in the controlled stations was 55 for every 1,000 of strength, and in a mean strength of 50,000 men the State was saved the cost of 2,750 cases of primary venereal sore in that year, and the men were saved the enormous injury to their strength which would otherwise have resulted.

In 1882 there were 14 stations strictly controlled under the Act, with a mean strength of

41,788 men

Putting against these all other stations not under the Act, with an average strength of . . . 45,064 men

We find,

Admissions per 1,000 (14 stations *under the Act*) . . . 78
Admissions per 1,000 (not under the Act) at all other stations . . . 124

Taking the first seven years that the Acts were in operation we have the following figures (1865-72 inclusive):—

Admissions per 1,000 (all stations not under the Act), mean strength 32,528 men . . . 103.1
Admissions per 1,000 (stations under the Act), mean strength 30,765 men . . . 62.8

1880-2: Taking the last three years of the Acts we have:—

Admissions per 1,000 (all stations not under the Act), mean strength 43,372 men . . . 122
Admissions per 1,000 (stations under the Act), mean strength, 41,779 men . . . 76

Lastly, let us take the series of years during the operation of the Acts (19), viz., 1864-82 inclusive:—

Admissions per 1,000 (14 stations not under the Acts), mean strength 18,486 men . . . 116
Admissions per 1,000 (14 stations under the Acts), mean strength 45,468 men . . . 61
Difference, 55; or 90 per cent.

With these we may compare the years 1883 and 1884, in the former of which the Acts were practically abrogated:—

1883—14 stations not under the Acts . . . 188
1883—14 stations formerly under the Act . . . 110
1884—14 stations not under the Acts . . . 160
1884—14 stations formerly under the Acts . . . 138

Lord Robert's shows by comparison that between

1883, when the Acts were in full force in India, in no stations did the number of %
venereal cases of sick in hospital reach . . . 30

At only two stations was it over . . . 25

While at some stations it was just under . . . 12

In June, 1888 (the year the Acts were suspended)

the percentage rose at 13 stations to over . . . 50

At a great many stations it was just under . . . 50

And at the majority of the remaining stations

over . . . 30

In Calcutta, it can also be shown that syphilis sank from a high ratio in 1868, that is *before the Acts*, from . . . 10

To a low ratio in 1880 (during the Acts) of . . . 1.7

And for two years (1873-4) during the Acts . . . 1.4

But it rose to a high ratio in 1883 (after repeal) to . . . 11

And actually as high in 1884 as . . . 30

C.D. ACTS IN FRANCE.

If it be desirable to know how the action of our Government with regard to the C.D. Acts is looked upon in France, we have an excellent opportunity for enlightenment in a communication which was read at a meeting of the Académie de Médecine in Paris on the 21st May, 1895, by Dr. Commenge. The documents furnished in England by the Minister of War, said the speaker, have brought the gravity of the case into prominent relief. In 1892, out of 196,336 soldiers, 52,155, that is to say upwards of a quarter of the entire British army, were admitted to hospital on account of venereal disease. In the opinion of the majority of army and medical men this extraordinary development of venereal diseases is with justice to be ascribed to the abolition of the C.D. Acts. It will be interesting to draw a comparison, continued Dr. Commenge, between the existing state of affairs in England, where prostitution is free, and that obtaining in France, where, happily, some proscriptive measures still

remain in force. In 1875, the year that venereal diseases were most prevalent in the French army, the number of cases was equal to 74.6 per 1,000.

The highest rate in the British army is referable to the year 1886, and amounts to 274.4 per 1,000.

In the French army that year the numbers yield 52.1 per 1,000 only.

When we examine the returns in order to ascertain prevalence of syphilis the following are the results:—

In the French army the worst year for syphilis was 1875, when the proportion of cases was 11.3 per 1,000.

In the British army during the same year it was 28.8 per 1,000, and in 1887, when the highest ratio was reached, it was 46.6 per 1,000.

In France during the latter year it was only 8.9 per 1,000.

Dr. Commenge has, moreover, made a study of the sanitary conditions of the Russian army, where venereal affections maintain about the same level as they do in the French army. Needless to say prostitution in Russia is under the control of the authorities. The relative prevalence of venereal disease in the three armies is shown in the subjoined table, the figures giving the cases per 1,000 of strength:—

	England.	France.	Russia.
1889 ...	217.1 ...	45.8 ...	40.7 ...
1890 ...	212.4 ...	43.8 ...	43.0 ...
1891 ...	197.1 ...	43.7 ...	41.5 ...
1892 ...	201.1 ...	44.0 ...	44.6 ...

The following table shows the comparative prevalence of syphilis alone:—

	England.	France.	Russia.
1889 ...	35.7 ...	9.1 ...	12.9 ...
1890 ...	37.3 ...	9.1 ...	13.4 ...
1891 ...	32.2 ...	8.9 ...	12.2 ...
1892 ...	33.8 ...	9.2 ...	13.7 ...

Dr. Commenge also found that the incidence of venereal disease was largely influenced by the presence or absence of clandestine prostitution in the various garrison towns. Paris, Algeria, &c., were notorious centres of illicit intercourse, and it was in these districts that the venereal rate invariably attained its maximum.

He concluded (1st) that venereal diseases are always far more numerous in countries where there is free-trade in prostitution than in those where regulations are enforced; (2nd) that the regulation of prostitution serves to attenuate the virulence of the venereal diseases and to hinder their progress.

—*Lancet*, June 29th, 1895.

THE EFFECTS OF THE REPEAL OF THE CONTAGIOUS DISEASES ACTS IN THE STRAITS SETTLEMENT.

The first application of the Act in that colony took place in 1870. Its operation was attended with marked success as to call forth expressions of approval from the officers in charge of the troops, and the Admiral in charge of the station. Its benefits were not confined, however, to soldiers and sailors only, but extended to all classes of the community. As showing the effects upon the soldiers, it was reported by the medical officer of the garrison in 1885 that there were only 75 admissions to hospital for venereal diseases out of a strength of 870 men, or a ratio of 86 per 1,000, and of this number only 16 resulted from primary disease, or about 18 per 1,000, none being of a severe form. It is painful to turn from this to note the effects of the repeal of the Act. In the year following its suppression the admissions for venereal diseases arose in one hospital alone from 4.68 to 19 per cent., while all the other hospitals showed a similar increase. Those who

have resided in the colonies know well how terribly these diseases are aggravated by the excessively dirty habits of the native women, the great heat of the climate tending to aggravate their lazy, lethargic temperaments. The treatment in Lock hospitals has a more beneficial effect in promoting habits of personal cleanliness in the patients, and this had a marked effect in the Straits Settlement, not only in checking the amount and extent of the disease, but also in lessening the severity of the type. There was no friction during the administration of the ordinance, which worked smoothly from its first application until its repeal. The disastrous effects of this are evident, not only in the increased ratio of disease among soldiers and sailors, but also amongst the citizens generally.

—*Lancet*, February 11th, 1893.

C.D. ACTS IN ITALY.

By special enactment in 1881 the police surveillance was relaxed throughout the Italian Peninsula, and as a consequence venereal disease in its worst forms so increased that the Government had to rescind the enactment referred to and return to the regulations previously in force. Professor Angelo Scarenzio, of the University of Pavia, read a painfully instructive report upon the subject before the Lombard Institute. His paper was based on statistics compiled from the various centres of the Italian population from 1888 to 1891. The aggravation of the diseases is greater not only as to number but as to virulence, and has reached the point of a public calamity. The patients, almost all males, in the Dispensario Celtico of Pavia, rose from 166 in the first year of relaxed surveillance to 203 in the second, and to 303 in the third year; and what impressed him even more was the fact that the augmentation revealed itself especially in the infective forms, which impregnate the systems as a whole, and transmit the virus through the medium of generations. In comparison with other venereal forms the percentage of infected forms was in the years mentioned 9.2, 17.7, and 18.1, and in the foundling hospital, where the sufferers were infants with congenital syphilis, 3.82, 5.22, 5.46. It is not limited to dispensary patients, but extends to the well-to-do and special bodies, such as the army and navy. The Government, unable to ignore the facts, have, by new regulations, whether in house or dwelling apart, to submit the choice of physicians to a sanitary council; to make subjection to treatment compulsory in patients where there is no guarantee that they can be properly attended to in their own homes; and to multiply their dispensaries. In conclusion, Dr. Scarenzio urges a more vigilant and more extended surveillance so as to include clandestine prostitution, and bring not only unfortunate women, but all venereal patients of the other sex, under hospital treatment.

—*Lancet*, February 27th, 1892.

C.D. ACTS AS ENFORCED IN MALTA.

There is one part of Her Majesty Queen Victoria's dominion in which the Contagious Diseases Acts have not been repealed, but continue to perform that useful and beneficial work. This is the island of Malta. As is well known to many readers of the *Lancet*, prostitution on this island had been subject to inspection for a very long time, how long it is not known, but it is believed to have been introduced during the early years of the government of the Knights, more than 300 years ago. The difficulty of finding out when and by whom medical inspection originated caused it to be stopped for a time. This was in 1859; but such serious consequences resulted, as might have been expected in so small and densely populated an island, with a large

naval and military population, and liable to fresh importations of disease almost daily, that the ordinance of 1861 was passed. It was on this ordinance that the English Contagious Diseases Act of 1866 was framed. The value of the medical inspections was clearly shown by the increase of disease which had occurred during its suspension among the women previously subjected to it, as well as among the soldiers, sailors, and civilians, who resorted to them; while on these inspections being resumed a diminution of the disease was soon apparent. That the island is comparatively free from venereal diseases, and especially from syphilis, is shown by the reports of the military and naval officers, as well as that of the civil surgeon, Dr. Pisani. These and many other interesting facts will be found in two Parliamentary Papers, No. 347, bearing date September 16th, 1887, and No. 59, dated March 6th, 1889, both of which may be procured for 1s. 8d. post free. A full report of the debate in the Maltese Council will be found in the last-mentioned paper, when the motion for the repeal of the Act was defeated by a decisive majority, notwithstanding the support of the Governor and all the official members. Thus the Acts have been in force in Malta for a considerable period; they have been repealed for two years, re-tored to the statutes, and have been in force ever since, now a period of thirty-three years. The Acts in England and Ireland were repealed practically in 1883, and wholly in 1885. What have been the results? This can only be ascertained by a searching inquiry, which it would be useless to ask the Government for now, but which must come sooner or later.

—*Lancet*, June 30th, 1894.

Opponents of the Acts characterise them as ghastly State regulations of prostitution. It has been shown over and over again that the State has never attempted to legalise prostitution, but to stamp out or lessen contagious disease at certain naval and military hospitals. This jumbling together of vice and disease is a common one with the opponents of the Act, and has the effect of gaining for them a large number of votes from unthinking and illogical people, who imagine that disease and vice are necessarily cause and effect. A man may keep a mistress and lead an immoral and vicious life for years and still have no disease, while another may through one rash act contract the disease and transmit it to his wife and unborn children. Is the former, because of his freedom from disease, to be considered perfectly pure in mind and body and a character eminently to be desired, and is the wife of the latter, the unfortunate but perfectly innocent wife, to be shunned, neglected, and degraded, because she has a disease against which in reality she should have been protected? The idea that venereal disease is a heaven-born punishment for vice has long since been exploded. As in England the regulations were enforced over a limited area only, so, in New Zealand, Christchurch and Auckland at one time were the only towns blessed or cursed with their enforcement. Now we should expect to find that in London and other parts of England—and in Dunedin and Wellington, coming to New Zealand—an enormous amount of positive and negative evidence as to the effects of the Act. Now, if State regulation of prostitution really increases prostitution and vice of all kinds in these particular towns just mentioned, where no enforcement took place, we should expect to find a great lessening in the amount of vice and prostitution; while in the Act-enforcing localities such as Chatham, Dover, Portsmouth, &c., Auckland or Christchurch, there ought to be, according to these agitators, a marked increase of flaunting vice. But is

this the case? The very contrary is what we find. The reports of various commissions before the Lords and Commons in England have shown conclusively that the effects of the Acts in reducing prostitution and giving a more orderly and decent condition to the public street is undoubted, and the reports of the police and magistrates in Christchurch and Auckland after a few years of enforcement in these cities show that the benefits in repressing juvenile depravity and solicitation in the streets were very great. On the other hand, the non-enforcing towns, such as London, Dublin, &c., Dunedin and Wellington, prostitution was continued as before, and is in no way reduced. Juvenile depravity increases steadily in proportion to the population, and in fact there has been, if not a deterioration, a steady maintenance of their level of prostitution. And again, since the Act was repealed, the towns formerly subjected to them have not improved, but have steadily gone back. Prostitution has increased in its worst forms, so that the local authorities would gladly welcome the re-enforcement of the Act. Here in Dunedin nearly all the cases we see are in the male sex, possibly from the fact that women are often almost in absolute ignorance of the symptoms, or even of the existence of the disease. Again, their diffidence in coming before a medical man, owing to their feeling of modesty, deters them; also the fact that the primary symptoms are not generally brought so prominently under notice as in the male sex (no doubt due to the physical condition of the parts); and again, in innocent women from ignorance of the danger, and in those who, being immoral, really know what has happened, from a desire to conceal their unfortunate and deplorable condition. I may say from my own experience that very few women are treated for venereal disease by physicians in Dunedin, but syphilis there must be in considerable amount, for where can the men contract it? I mention the following examples of venereal disease which have come under my own personal supervision within the last few years, and which seem to illustrate the dangers of unnotified contagious disease.

S. J., 19, milk boy. Acute gonorrhoea; thick yellowish-green discharge pouring from urethral orifice, soaking and staining his clothes. For over a fortnight this boy milked the cows, handled the milk, carted the milk to town and distributed it. On my remonstrating with him, said he couldn't help it. His employer was a near relative, and he couldn't ask for leave. He continued at work while under treatment. Urinating very often, as he said, constantly having to leave his cart and unbutton his clothes, &c., there is no doubt his hands were in frequent contact with gonorrhoeal matter, and the great risk was run of contaminating the milk.

J. K., 26, single, butcher's assistant in the shop rider out, &c. Came to me suffering from well-marked hard sore on his penis, undoubted syphilitic chancre; pointed out to him the danger of infecting others. He was actually at the time supplying families in the neighbourhood with meat, was cutting up meat in the shop, constantly handing it over the counter, and riding round distributing it. He had a long course of medicine and completely recovered, though all the time continuing his work.

B. M., 29, single. Had history of a sore on his penis. When I saw him he had enlarged glands of the groin; showed signs of disease at the left apex; had a tubercular appearance, and was losing flesh and sweating at night. As the glands threatened to suppurate, gave him chloroform, and excised two very large masses, but found them more typical of syphilitic disease than

of tubercular. Gave him a long course of mercury, during which he showed well-marked sore throat, rash on the chest and back, loss of hair, &c. After six months went to the country. and came home, having gained two stone. Went to live with friends, and promptly seduced and no doubt affected with syphilis a young woman living in the same house. Now, consider what would have happened had a modified contagious and infectious diseases Act been in force. These cases would have been privately notified to a Board of Health, whose meetings or discussions would be scrupulously secret. It would have to be composed either of medical men, or of men who, if divulging anything coming before them officially, would be by law guilty of a breach of privilege, and criminally liable. This Board would notify the cases to attend at a certain time and place for treatment, such treatment to be continued so long as the examining surgeon may think necessary. Penalties for neglect of treatment or attention to regulations would be enforced. Treatment would be allowed privately, providing persons affected were strictly isolated, under fear of punishment, and regularly at intervals presented certificates of treatment from a recognised practitioner. Men who were known frequenters of brothels and public places at late hours would be punishable unless they could produce clean bills of health, in the same way as the unfortunates of the other sex. It might also be made penal for anyone to treat a case of unnotified contagious disease. This, it is evident, would do away with a large amount of the counter treatment of these diseases by chemists and others, who would be compelled to ask whether the disease were notified, and if not to decline treatment for fear of punishment, unless the would-be patient accede to the demand for notification. The onus of notification would also rest on the patient himself or herself, who would be punishable if the disease were unnotified 48 hours after it had been diagnosed by anyone in a position to know the nature of the disease, or to efficiently treat it, and in the case of concealment of disease and neglect of treatment, severe punishment would be enforced if notification did not take place within one week of onset of symptoms. The nature and extent of the disease would form a very fair guide to the Medical Board or Examining Officer in deciding how long such a case had been in existence unnotified, and the opinion of the Board, as to whether such had existed over a week could be with perfect safety taken as correct for the purposes of punishment. Any person whatever who is cognisant of the existence of such a contagious disease in any one of his or her acquaintances would be liable to a fine if he or she did not satisfy himself or herself that such disease had been reported.

With regard to the Board, and also the examining officers, they should be paid a fixed salary by the authorities, and not in any way in proportion to the number of cases reported or brought before them, and the fee for reporting any case of infectious disease, at present 2s. 6d., and generally fixed (but not paid) by the authorities, might be done away with altogether. If a notification fee were still thought desirable, the medical officer could obtain his notification fee from the patient personally on the first application, giving him in return a notification ticket. Those persons who might prefer to notify personally to the authorities would obtain from them free of charge a notification ticket or form. This would have to be produced on demand, to exempt from free notification by the examining doctor, or by any other person who might imagine himself to be liable. Private medical men would thus have no advantage to gain in steadily sup-

porting this system, and it could not be thrown up against them, as it was by an hon. member of our Legislature, "that the doctors were interested in the notification of these cases—being paid for the examinations," and that from a purely commercial point of view did they support these Acts. This was a cruel, malicious, and undeserved statement, the absurdity of which is patent to anyone cognisant of the workings of the present Infectious Diseases Act. The details of the new Act could be easily worked out on much the same lines as the old Act, which would with safety be allowed to remain on the statute book, and be gradually amended by various clauses, which would attack, or rather protect, both sexes. To eliminate the "Compulsory Examination Clause" would, in my opinion, be a retrograde measure. Rather would I so far give way to the outcries of an hysterical multitude, as to the indecency of this (which I of course deny), as to allow of the appointment of one or more female medical practitioners. These would be specially appointed by the Government on the recommendation of the Local Notification Board and the University Council, and could be consulted or called in by any persons so desiring it. But of these, I am convinced, the number would always be insignificant.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrsman, R. Bohrsman, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Forbes (Ashfield), Tayler (Woollahra), Scott (Balmain), Anderson (Petersham), Patrick (Marrickville), R. H. Collins (North Sydney). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Davenport (North Sydney), Brereton (Marrickville).

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Treatment, September 23rd, gives a precis of a paper by Dr. A. A. Lendon, of Adelaide, published in the *Australasian Medical Gazette*, Dec., 1896, entitled, "Unsuspected Renal Calculus."

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A CASE OF ACUTE PNEUMONIC PHTHISIS.

By T. L. ANDERSON, M.B. MELB., RESIDENT MEDICAL OFFICER, FREMANTLE HOSPITAL, W.A.

THE following case exemplifies the difficulty of distinguishing the pneumonia due to a massive infection of the lungs by the tubercle bacillus and the ordinary lobar pneumonia.

History.—T. A., *et.* 18 years. Ill six days before admission with headache and vomiting; slight cough, with little yellow sputum. Pain in left side of chest, increased by coughing. Always good health previously.

Examination.—Dulness in left axilla and at base, with increased fremitus. Bronchial breathing, with bronchophony very marked over dull area. Heart sounds rapid, but clear.

Course.—Friction sounds heard around left nipple two days after admission. On fourth day dulness below right clavicle down to nipple, with bronchial breathing and bronchophony. Sputum at this time rusty colour and very viscid. T. varied from 103° to 104°, and Resp. 28 to 34, during first week. Always slept well, and no delirium. During second week remissions in T. from 1° to 2°. Resp. 32 to 40. Marked wasting, and profuse sweating. Cough not very troublesome. Passing undigested milk. During third week phlebitis of both legs developed, first in right leg, and two days later in left. T. always over 101°, with remissions of 1° to 2°. Resp. 36 to 44. Tendency to diarrhoea. Heart became gradually more rapid and irregular, and patient died twenty-three days after admission.

Treatment.—The most noteworthy point noticed was the action of Digitalin, 10 gr. given hypodermically, in steadying the heart when its action became irregular.

Post-mortem.—Right heart dilated. Tricuspid orifice admitted five fingers.

Lungs.—Left base consolidated; coarse tubercles scattered all through consolidated tissue. Upper lobe of right lung also consolidated, and contained coarse tubercles. Bronchial glands on both sides enlarged, but not containing any old calcareous deposit. No old calcareous deposit discovered at apices.

Remarks.—The diagnosis would have been settled by the discovery of bacilli in the sputum, but as no stains were available at the time this could not be done. The case was looked upon as an ordinary lobar pneumonia, and as the T. still kept up in the second and third weeks, with the passage of undigested milk and a tendency to diarrhoea, it was then thought to be a case of enteric fever, with the not infrequent complication of an initial pneumonia.

SHORT EXTRACTS FROM FOREIGN LITERATURE.

By WALTER SPENCER, M.D.

JANUS, INTERNATIONAL ARCHIVES OF MEDICAL HISTORY AND GEOGRAPHY, AMSTERDAM. (Monthly.) Livraison No. VI.

Among polyglot serials which have lately come into existence, none can plead greater justification than this erudite magazine, whose pages are allotted to scholars impartially, irrespective of language in the echoing Babel of modern literature.

Calculi deposited in various viscera are familiar enough, but during the middle ages they appear to have been commonly formed in the head, to the honour and profit throughout Europe of peripatetic quacks called *Surgeons of Stones in the Head*, to whom an article by Dr. Meige, of Paris, is devoted. "Their operation consisted of a light incision of the skin, followed by a pass of *leger-de-main*, which caused a stone to fall out before the patient's eyes that the operator pretended he had just extracted. The seat of election was usually the frontal or mastoid region, and the surgeon's patients were those actually suffering from cephalalgia, migraine, neurasthenia, as well as neurotic or hysterical, sometimes probably demented, persons." Blind confidence was supplied on the one part and audacious *fourberie* on the other. The "stone in the head" was equivalent in ancient times to the *astrum*, or gadfly. Descriptions of its neuropathic indications are numerous among Greek and Latin authors. Copies of old engravings which depict the operation accompany this article, from which it would appear that friars were frequent patients. Doubtless the operators cultivated the most friendly relations with the priesthood. It must have been convenient for relatives to be able to run in anyone of hysteric or erratic habits for this operation, which, apart from its powerful moral effect would for ever after afford interest for reflection and discussion, supported as it was by the tangible stone (gratuited *à discretion* to the nature of the case). Cures must have been frequent, and patients made very proud.

"Loopt, loopt met groot verblijden
Hier al men 't wijt van klijje snijden."

An old Orientalist may be permitted to hail with warm satisfaction the first *Sketch for a History of Phœnician Medicine*, based on recently discovered Egyptian MSS. Phœnicia has been hitherto known to us through her Syrian and Mediterranean colonies, but the motherland of Punt or Punit (hence "Punic") lay east of the Red Sea, where cuneiform script reveals the existence of a primitive Akkadian culture.

Lieblein's hypothesis is advanced, that the Syrian colonists assimilated the language of the Hebrews, even as the Normans did of the French and of the English; the north coast of Africa, Malta, Sardinia, Sicily and Gibraltar being afterwards colonised and Semitised by this Semitised Hamitic stock. The sketch treats mainly of the first documentary evidence of medicine (already noticed in the *B.M.J.*), which reaches us from the city of On—the centre of the Egyptian Olympus—on the route from Palestine to the Nile Valley. It discloses fragments of a pharmacotherapy that give proof of a highly-developed pre-Egyptian system. Up to the date of Eber's papyrus (1550 B.C.) the centre of Phœnician culture was at Byblos, coëval with the completion of the Pentateuch and the Trojan war, where the Syrian women annually went weeping for Th'Amuz. In the time of Solomon the centre had shifted to Tyre, and was transferred later on to Carthage.

The old Phœnicians have often been compared to the modern British. They had a virtual monopoly of transport between the West and Asia, and did a large trade in drugs. In many countries which they visited they struck roots of abiding influence.*

The addition to their pharmaco-therapy of religious superstitions, spells and charms, evinces the predominance of their priesthood. All scientific attainments were anciently the esoteric property of that privileged caste whose knowledge was power. We know that in one monarchy Eth-baal, a priest of Astartè (father of Ahab's Jezebel), was powerful enough to dethrone and supplant his king. Traces of dedication to deities of their Pantheon are not wanting to this day. If a modern Gaditano (Spaniard from Cadix) be asked of his birth-place, his reply bears the unbroken tradition down from Ishtar—"La tierra de Maria Santissima."

The author notes the only surgical operation mentioned in Eber's papyrus, as being of pre-historic Phœnician origin—removal of eyelashes for Trichiasis.

Dr. Buret, of Paris, contributes, from materials scarcely less meagre, the first part of a *History of Medicine among the Romans before the Christian Era*. The rude soldiers and farmers of the early period probably received treatment only for wounds and fevers, except when overtaken by pestilence. But all must remain conjectural, for the presence of Celsus, a Greek of the school of Hippocrates, proves nothing. But when the wealth of conquest and the burden of Empire had bred moral corruption, and fostered whole classes of voluptuous patricians into unbridled licence, a corresponding therapeutics must have been developed to cope with a host of ills engendered by gastronomic excesses and venereal depravity. Then lessons must have been taken from the despised Asiatics and detested Greeks. To elucidate these conditions Dr. Buret promises a continuation of his essay. He touches upon massage, hydro-therapy, and the temple cures, and sums up, "That only at the termination of the Roman Republic can one find the names of men who had made a scientific study of medicine. That up to that period the Romans, from the foundation to Cæsar, were the prey of charlatans. Science has progressed since then, but swindlers are always active, knowing that their scope is co-incidental with human folly and will last as long."

Dr. Rasch writes on the *Geographical Pathology of Siam*, giving an interesting description of its medical and obstetric practice. Much of it applies equally to many peoples of the far East. He states that anyone who acquires any special ideas or supposed remedy for any disease starts incontinently into practice, and transmits the method to his children or disciples, who in their turn take patients whenever they think fit. Massage is especially practised and believed in for all ailments. The process is worked with both hands and feet.

A curious and widely-spread custom of great antiquity is described as the "lying-in by the fire." The recent accouchée is laid upon a pallet, four feet distant from a small furnace. She wears a loin-cloth only, and is instructed to turn herself frequently to and fro, especially exposing her abdomen to the heat. A primipara must be thus semi-roasted for 30 days, after the second delivery for 25, after the third for 20, after the fourth for 15, the period being progressively shortened until after the seventh she need not repeat the process. Its avowed object is to cause the uterus to con-

tract more quickly, and to "drive the blood back into the usual channels of menstruation." A high rate of mortality after pregnancy is the result.

I have frequently noticed through the open doorways of Malay huts the practice of a rude massage during parturition, the wife lying upon the floor with the husband standing over her, gently rolling her to and fro with his naked foot on her abdomen.

Dr. Trosse traces the sources of the *Drugs Supplied to the Greeks according to Alex. Trallianus*. Amongst them were Cassia, Spikenard, Armenian Karkh, Soap (from Gaul), Wax, Styrax, Wormwood, Valerian, Hysop, Gentian, Parsley, Honey, Celandine, Saffron, Tragacanth, Natron, Veratrum album, Helleborus niger, Pot. Carb., Sulphur, Delphinium, Staphisagria, Mustard, Alum, Pepper, Laurel-seed, Nut-galls, Pellitory, Frankincense, Elaterium, Horehound, Mentha Pulegi, Salix, Bryonia, Marjorum, &c. Warning is given against the use of Macedonian celery and Cnidian quince-water. We are told that the Cretans believed much in the efficacy of the number 2,193 taken in the hands and held to the nose.

Dr. Ashmead, of New York, writing on *Leprosy*, says that if enforced isolation and a permanent committee of official delegates do not result from the Berlin Congress that Congress will have been held in vain.

Other articles of merit deal with the *History of Leprosy in Poland*; with the *Widow C. G. Schraders*, who in 1693 investigated the anatomy of the placenta; with the *History of Medicine in Denmark*, &c., followed by a minute Bibliographical Review.

SCIENTIFIC COLUMN.

REPORTS ON FOODS AND BEVERAGES MANUFACTURED IN THE COLONIES.

[The following is the first of a series of articles which shall from time to time appear in these columns upon the above subjects.]

NEW SOUTH WALES LAGER BIER.

As in all industries so in the brewing industry, great revolutions have taken place, and much more striking in this latter industry for the very reason that it was partly neglected by science, and on the other hand that brewers did not know how to avail themselves of the scientific discoveries. It is only within the last thirty years that the science made itself timidly felt, but it did not take long before it took a solid footing in this industry. This is plainly illustrated at the brewery premises of the N.S.W. Lager Bier Brewing Company.

Formerly, thumb-rule brewed beer; now well-equipped apparatus and machinery automatically perform all necessary manipulations in the manufacture of lager bier.

It may be mentioned that all lager bier drinking nations consider this beverage more as food than a luxury. Professor Liebig already must have been quite convinced of this fact when he asserted that "Good bier is liquid bread."

As the conscientious brewer, convinced of this doctrine, cannot do otherwise than endeavour to make this liquid bread a healthy food, it is worth our while to see how he goes about to accomplish this.

The Raw Materials.—The raw materials used for the production of lager bier are malted barley, hops, and a small proportion of rice, the latter being used mainly for the superiority of its starch, this being more predominating than in other grains on account of containing less albuminoids and fat. Both of these latter in-

*See Velthusen, *Merkwürdiger Einfluss*; Higgins' *Anacalypsis* and *Celtic Druids*; O'Brien's *Round Towers*; Da Costa's *Sidonian Builders*; Dollinger, *Heldenthum u. Judenthum*, &c., &c.

redients are more predominant in all other grains, and are found in a larger proportion in the barley than could be wished, for the manufacture of a lager bier with good keeping qualities.

The Malting of Barley.—The malting of barley is imperative before it can be used for the manufacture of beer. It may be interesting to know what malting is.

The maltster starts the growth of the acrospire in the barley kernel by first steeping it for the purpose to give it the required amount of water necessary to induce life in each individual kernel. The process of malting requires a period of six to eighteen days, this all depending upon the nature of the grain, and the climate in which the malting takes place. During this period the acrospire develops, and when its length reaches pretty near the full length of the kernel it is considered that the starch is made sufficiently soluble, and that the required physical and chemical changes which are necessary to produce good malt have taken place. Physical changes can be noticed under the microscope, as the starch cells in the malted barley differ considerably from those in the unmalted barley. Amongst the chemical changes there are two enzymes (chemical ferments) formed. The one is "diastase," and it is its duty to convey the starch into the different sugars; the other is "peptase," which latter peptonises the albumens during the mash. These actions we shall get more acquainted with at the brew-house, where the brewing is performed.

Brew-house.—The brew-house of the N. S. W. Lager Bier Brewing Company is equipped with the most modern apparatus and machinery, in good order, to enable the brewer to get the very best result possible so far as the quality and quantity of the resulting bier is concerned. In the first place we notice the malt-cleaning machinery, which is almost automatic. With this machine every particle of unclean matter which may hang to the hull of the kernels in the form of dust is removed by exhaust fans whilst the malt is in transit, and whilst it runs through specially-constructed screens. It is evident that in removing all this uncleanness in the very beginning of the process of the brewing, it will save a great many difficulties during the latter part of fermentation.

The malt now passes through an automatically weighing scale, and after passing over strong magnets to arrest all iron and steel particles which the malt may contain, from here it falls on to the steel rollers of the mill and is here crushed, and then it is conveyed by bucket elevators to an iron receptacle, ready from here to gravitate to the mash tub.

The Mash.—The mash is a very important manipulation in the art of brewing. Here the starch of the malt is converted into the different malt sugars (through the enzyme diastase), such as maltose, dextrine, and isomaltose. These different sugars are formed under different temperatures, and at a low temperature (104°) a large amount of the raw albumens are paptinised. In a few words, during the mash the chemical composition of the wort is fixed. When the mash is complete, the wort is filtered through its grains (hulls of the malt), and so reaches the copper boiling kettle perfectly brilliant. Here the bier is boiled for two or three hours for the purpose of evaporating some water so as to give the bier its wanted specific gravity, and also to coagulate surplus albumens. Here the hop is added, so that under the prevailing high temperature its etheric oils are better absorbed by the wort. The wort is now finished, and ready for cooling. It is passed through a filter constituted by its own hops, and reaches the cooling apparatus (refrigerator) perfectly brilliant, and in an absolutely sterile condition.

Cooling Apparatus.—In cooling, the first danger of infection with the germs which the air always carries with it must be faced. In order to do this effectually a closed cooling apparatus made entirely of copper is used. The necessary oxygen which is required by the yeast to commence a healthy and vigorous fermentation is first allowed to pass into the cooling wort, where at a high temperature a good portion of this oxygen is chemically fixed; whereas at a lower temperature, a few degrees above 40°, is physically held by the wort.

Air Filter.—This air, however, is not the ordinary atmospheric air, but it is air which has been filtered over highly compressed and previously by heat sterilised cotton filters. It is a well-known fact that cotton air filters, when rightly manipulated, are absolutely reliable filters. That is to say, they will not allow any germs to pass through their filtering material. It may here be mentioned that all pipes, rubber hose, and different apparatus through which the wort passes, are first sterilised by boiling water and live steam, so that they may become worthy to receive a so-carefully-brewed and a so-well-protected wort. In this way the New South Wales Brewery is enabled to convey absolutely sterile wort into their fermenting cellars. Here also great precaution has been taken to sterilise both air and receptacle.

Vacuum Tanks.—These tanks are made of steel, and their interior surface is lined with a glass enamel, so rendering a perfectly smooth surface which is easily kept clean, and by not being porous it makes a far superior vessel to all wood receptacles, which harbour in their joints and pores uncountable bacteria and foreign germs.

Yeast.—The yeast which is used in this brewery is propagated from a pure yeast culture, according to Professor Dr. Emil Christian Hansen's method. The latter consists of bringing a drop of the diluted yeast into a gelatine-wort nourishment. Before it gets cold and settled it is well mixed, and then spread on an object-covering glass, which is placed over a moist chamber so as to prevent the drying out of the gelatine solution. When this is done, and the gelatine is quite settled, it is brought below a microscope, and here all cells are marked. At a temperature 25 centigrades the respective yeast cells are rapidly reproducing, and at the end of twenty-four hours small yellow specks are noticeable. These colonies are then transferred into Pasteur flasks, which contain sterilised wort. Biological and morphological tests are then employed to ascertain what species of yeast are being dealt with. The yeast wanted for bier fermentation is known as *saccharomyces cerevisæ*. Once the right yeast has been found, the propagation to obtain larger quantities goes on very rapidly in specially-constructed apparatus. This apparatus is kept in constant work so as to enable the brewer to always have large quantities of pure yeast at his disposal. This yeast is then pitched to the sterile wort which is awaiting it in the cellar, and the fermentation can now proceed. This fermentation takes place at a temperature between 40° and 50°, and under partial vacuum of 18 to 20 inches mercury column. It is a fact that the fermentation is more vigorous and a healthy one for the reason that one of its main products is removed as quickly as it becomes generated, i.e., carbonic acid gas, which latter is stored away in the meantime, and the necessary amount of this is added to the bier again with a carbonating apparatus. The surplus of this gas amounts to nine-tenths of what was stored away, and is made a commercial by-product to the brewery in purifying and liquefying it. This can

be used by aerated water men, &c., and is also used for the drawing of lager bier by the company's customers.

As soon as the fermentation is completed, that is to say as soon as all the fermented sugars are broken up by the action of the yeast, the then fermented bier is relieved from its vacuum by air which has also been previously filtered. It is now cooled to the freezing-point of water, and forced through two high-grade filters (the filtering material being spruce pulp), leaving the filters in a perfectly brilliant condition, and passes through the carbonating apparatus where the carbonic acid gas which has been stored up during fermentation is now by physical means impregnated into the bier, thus giving the latter the necessary life. Good lager bier contains about 0.32 % CO₂. This large amount of carbonic acid gas has a great tendency to render this beverage a good digestive. To impregnate lager bier with carbonic acid gas is quite a new feature. The old way consisted in simply adding to the aged bier 10 to 15 % of a very young bier (the technical term for this is "Krausen"), thus adding a great number of yeast cells, an unfermented sugar, to the bier, and so reducing its quality instead of bettering it.

Summary.—We have seen that utmost precautions are taken to render the lager bier of this brewery a wholesome beverage, with all the characteristics of a good tonic. During the brew-house manipulations great care is taken that the chemical compositions of the wort is the most favourable one obtainable. We have also seen that most scientific safeguards are employed to prevent infection from foreign germs of the (in this respect) most sensitive wort. We have also seen that all the receptacles used in the manufacture of this lager bier are of such construction as to ensure absolute cleanliness. The carefully selected yeast, the exact result of its activity is already known to the brewer at the time that he pitches the same, we can see at once what great benefit such accuracy must be regarding the quality of the resulting bier. During the whole manufacture, that is, from the time the boiling wort leaves the kettle up to the time when the bier reaches the glasses of the consumers, it does not come in contact with the infectious atmospheric air. It is also absolutely protected against other mediums of infection. All these precautions make it possible that the two main products of fermentation—alcohol and carbonic acid gas—are as little as possible mingled with poisonous by-products of fermentation, which are mainly due to the activity of infections of foreign germs before and during fermentation.

The following is an analysis of this bier by Dr. Helms, M.A., F.C.S., of Sydney:—

(Copy.) 8 Bridge Street,
Sydney, March 14th, 1898.

The N.S.W. Lager-Bier Brewing Co., Ltd., Sydney.

Gentlemen,—The Lager Bier received from you for analysis, February 22nd, gave the following results:—Specific gravity, 1.0205; Alcohol, 3.20 per cent.; Extract, 6.63 per cent.; Ash, 0.176 per cent.; Sugar (Maltose), 1.477 per cent.; Dextrine, 4.570 per cent.; Glycerine, 0.252 per cent.; Carbonic Acid, 0.104 per cent.; Free acid, besides Carbonic acid, calculated as Lactic acid, 0.187 per cent.; Nitrogenous Substances, 0.490 per cent., containing 0.0784 per cent. Nitrogen. The Ash contains 25.57 per cent. Phosphoric acid, equal to 0.045 per cent. of the Beer.

I did not find any bitter substances except those characteristic for Hops, nor any preservatives.

The beer is in composition similar to some of the Lighter German Lager-Bier.

Yours faithfully,

(Signed) A. HELMS.

PROCEEDINGS OF BRANCHES.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 57th General Meeting of the Queensland Branch of the B.M.A. was held in the usual place on Friday, the 4th of February. There were present—Dr. Connolly (President), Drs. Marks, Dennis, Orr, Nall, O'Doherty, Moloney, and Jackson.

The minutes being read and confirmed, Dr. DENNIS exhibited the following pathological specimens:—1. An uterine myoma removed by Dr. Marks. 2. An extra uterine foetation. 3. A pair of lungs, each possessing an extra lobe (right and left).

There were two nominations for membership of the Branch.

Dr. MARKS read notes on the removal of the uterine myoma exhibited by Dr. Dennis. The case had been remarkable in the severity of the operation, there being many dense adhesions, and through the fact that the woman now menstruated to some extent through the site of the abdominal wound where the pedicle of the tumour had been clamped. The uterus had not been removed.

Dr. CONNOLLY expressed his thanks to the members for having elected him President, and referred in feeling terms to the death of Mr. Ernest Hart, who had done so much for the *British Medical Journal* and so much to consolidate the great Association to which we belonged.

The 58th Meeting of the Queensland Branch of the B.M.A. was held in the usual place on Friday, the 4th of March. There were present—Drs. Hare, Marks, Dennis, Comyn, Taylor, Francis, Robertson, Nall, K. H. O'Doherty, Jackson. Visitors, Drs. Love, Hardie. In the absence of Dr. Connolly (President) Dr. Francis took the chair.

Dr. JACKSON exhibited a case of rheumatoid arthritis.

After the ordinary business had been transacted, a ballot was held, at which Drs. E. N. Scott, of Clermont, and A. G. Salter, of Pittsworth, were unanimously elected members of the Branch.

Dr. HARE then read his paper, "The 1897 Epidemic of Dengue in North Queensland." (See p. 98).

DISCUSSION ON DR. HARE'S PAPER ON DENGUE.

Dr. TAYLOR said that he had listened to Dr. Hare's paper with great pleasure. It had put dengue in a different light to him. As a rule it had been regarded lightly. His own experience had been that it was easily dealt with both by medical men and the whole families who so frequently treated it for themselves. The disease as he observed it had been of very different types. Sometimes there was only a rash suddenly appearing without any malaise or other symptom. In his own case there had been very little rash, a temperature of 101° or 102°, and a little antikamnia had relieved the slight headache from which he suffered. He had noticed in some cases peculiar throat affections. He had seen the throat (fauces, tonsils, pharynx, and palate) covered with a bright red scarlatiniform rash. In one case there had been follicular tonsillitis, a child of three, and, from the tendency to coalesce in the spots, he had been fearful of diphtheria for some time; but he thought that the case had proved to be undoubted dengue.

Dr. LOVE had seen a good deal of dengue in common with every medical man in Brisbane during the past few months. He had been pleased to listen to Dr.

Hare's very systematic account of the disease. After reading Davidson and Manson he had come to the conclusion that our dengue was different to that described by them. This was the third year that we had had the disease here. The type of the present epidemic was much more like that spoken of by the writers mentioned than the epidemics of the two former years. The type in former years was much less distinct. The rash was more common than in former years. The rash, he had noticed, often picked the limbs rather than the trunk. The present epidemic might be said to conform to the description of Davidson and Manson. He thought there was a very strong parallel between dengue and influenza. There was less discomfort in the latter. He had seen no fatal cases of dengue. He had seen a considerable amount of nervous sequelæ. He knew of one case of peripheral neuritis, and there had been one death from suicide. In addition, two or three deaths from hyperpyrexia had been recorded, and he knew of two cases in which the mental equilibrium had been upset.

Dr. ROBERTSON, of Ipswich, said there were a few little points he would like to mention. As in the notes which Dr. Hare had read he recorded that the disease had been traced to contagion imported from somewhere else, so in Ipswich the first case he saw had come from Bowen. He believed that a few cases had been recorded in his town a few days before the appearance of the epidemic as scarlatina. Probably 80 per cent. of the inhabitants of the town of Ipswich had had the disease, and it appeared to him as if the disease had almost run itself out. There had been fewer in the last week or so. As to hæmorrhages, he had seen one case of epistaxis in a case of heart disease, which had been nearly fatal and had required transfusion of saline solution. One case of hæmatemesis had occurred in his practice. The man was a dyspeptic, and possibly he had an ulcer of the stomach. Also, he had seen one case of hæmoptysis in a case with bronchitis, and one case of hæmorrhage from the gums. As for treatment, he relied on a little antipyrin with a little aromatic sal volatile.

Dr. E. H. O'DOHERTY, after alluding to his appreciation of the paper read, said that he thought that the type of the disease was certainly getting more severe. He described a case of general paralysis of the limbs, following, or rather occurring in the midst of the disease, which ended fatally in three or four days.

Dr. HARDIE expressed his appreciation of the paper read, and said that the type of dengue in the north was evidently worse than it had been here. He had seen one woman suffering from the disease who had been almost maniacal with the pain. One case had had pleurisy and developed hydrothorax. A large quantity of fluid had been removed from the chest on two occasions, so that he had at length sent the man to the hospital, where he made a recovery in a few days, and was now walking about quite convalescent. He had seen one case in a state of collapse. He thought that when the germ of the disease had become acclimatised, there would be a much more severe type of the disease. There had been in his practice one case in which, as he suspected typhoid, he had employed the serum test, and had obtained the reaction of that disease. He had therefore sent the case to the hospital, where he believed the serum test had been used and a positive reaction obtained. However, the woman had developed a marked dengue rash in a few days. At a subsequent interview with her he had ascertained the fact that she had had typhoid 14 years before. He was in the habit of giving a warm bath to bring out the rash in

dengue to begin with, and then went on with the salicylates.

Dr. COMYN had seen many children with a dengue rash very like scarlet fever. Of late, the type of the disease, as he had observed it, had been very much worse. He had one case in which, following the taking of a large number of pills, the patient had become very ill, and had at last died in a state of general paralysis. He had also seen a child with paralysis, and had heard of that complication in a number of cases.

Dr. DENNIS, referring to the cases spoken of by other speakers as having gone to the hospital, said in Dr. O'Doherty's case of polyneuritis the patient had had all the pains of dengue nine days before admission. He stated he had been getting better when he found his legs getting weak. In three days after the onset of this symptom he died of paralysis of the respiratory muscles. In the case mentioned by Dr. Hardie, he had obtained a marked positive reaction to the serum test for typhoid, but the case had shortly developed a rash which was certainly dengue, and this had been followed by a cessation of temperature and symptoms. There was one remarkable symptom in the cases he had seen. There had been an interference with the menstrual function in probably three-fifths of the cases he had seen, either menorrhagia or metrorrhagia. He had seen one case of hæmorrhage from the lungs. Where the rash was well marked, it was to be seen also on the throat and fauces. Also, he had observed the spleen decidedly enlarged.

Dr. JACKSON had little to say that had not been said by previous speakers, but had seen two cases of peripheral neuritis other than those mentioned already, and had seen a few cases in which the cervical lymphatic glands had been enlarged and painful.

Dr. FRANCIS, after expressing his thanks to Dr. Hare for a description of dengue which was very vivid, said that he thought the disease was more severe when there was little rash, and *vice versa*. His own attack appeared to be more like a neuritis than anything else. He suffered from rheumatic pains sometimes, but they were different to those of dengue. He was in the habit of giving only two doses of antipyrin with a little salicylate of soda, and had found this very good for the headache. In later cases he had used potash iodide for the rheumatism which sometimes followed. As for the throat affections of dengue, he had seen the dirtiest sloughing throat following dengue that he had ever seen in his life. He had seen one other case of tonsillitis. In one, enteritis had been suspected, and the woman had died after passing some pumpkin seeds. There was some possibility of this being dengue, as two members of the family had since developed that disease.

Dr. HARE, in reply to the speakers, expressed his thanks for the kindly references to his paper, and said that he recognised in his cases two rashes—one initial, coming with the onset of the first symptoms, the other later, coming on after the first had disappeared, and accompanied by a final rise of temperature. There was no connection in his experience between the severity of the rash and the severity of the disease. He had not seen it mistaken for scarlet fever, because there had not been any scarlet fever in the Towers for years, and the difficulty did not arise. He had seen diphtheria, an epidemic of which was on at the same time, mistaken for dengue. As to the severity of the disease increasing as the epidemic went on, that was certainly so in the north, and the later epidemics had been worse than the first. The first epidemic had been mild, while in the last he had

heard of not less than eighteen fatal cases in Charters Towers alone. He had seen two or three cases of pleurisy. The treatment of the vomiting, which was sometimes a very distressing symptom of the disease, he had found best accomplished by two or three emetics of warm water. Drugs are without effect for its relief, and the emetics give complete relief. He had tried it first in his own case and since found it rarely failed.

IMPORTANT NOTICE TO MEMBERS OF THE NEW ZEALAND BRANCH.

Members of the New Zealand Branch who wish to receive the A. M. Gazette in accordance with the new rules of the Branch are requested to communicate at once with the General Secretary, DR. GRAHAM CAMPBELL, Christchurch; as after the present issue the Gazette will only be forwarded to those members who have notified their intention of taking it.

Manager, A.M.G.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

CANTERBURY SECTION.

THE ordinary Monthly Meeting of the above was held in the Caledonian Society's Rooms on February 10, 1898, at 8 p.m. Present: Dr. Fairman (President) in the Chair, Drs. C. M. Anderson, Campbell, Thomas, Manning, Irving, and Fenwick.

The Committee of Management reported that the Inspector of Police, in answer to a letter asking who was responsible for the fees where a medical practitioner received a telephonic call to an accident from the police, replied that if the patient was unable to pay, the Charitable Aid Board could be applied to. This was considered scarcely satisfactory, and the Hon. Sec. was instructed to write again and enquire if the Department would take the necessary action towards obtaining the fee.

A post-card from the B.M.A., re Medical Defence, was considered, the members agreeing finally to answer this individually for the present.

In the matter of the Druid Lodge, where Drs. Irving and Hacon had declined to examine a solicitor for admission, Drs. Manning, C. M. Anderson, and Campbell had been appointed a sub-committee to conduct the case. The following letter was drafted and forwarded to the Secretary of the Lodge:—

"Christchurch,
"Jan. 27th, 1898.

"Dear Sir,

"We, the undersigned, have been appointed by the local Medical Society as a sub-committee to approach your Lodge on the subject of the admission of professional men to the medical benefits.

"This Society has expressed very strongly its disapproval of such a procedure.

"We understand that some trouble has arisen from the application of a solicitor for benefit membership of your Lodge.

"A similar case arose about six years ago in a Foresters' Lodge, when Dr. Irving, while passing a solicitor as 'sound and eligible' for the Lodge (except for his professional position), sent in his resignation as Surgeon, to take effect if the candidate was accepted.

Looking at it from this point of view, the members decided that Lodges were instituted for the benefit of the working-classes who were unable to bear the expense of private medical attendance, and not for professional men, and declined to initiate the candidate.

"The medical profession has ever been foremost in giving its services gratuitously to the poor and needy; it also recognises the necessity for the existence of Lodges for the benefit of the working-classes, but naturally objects to the inclusion of those, as benefit members, whose circumstances enable them to afford a private medical attendant.

"We trust that the Lodge will not further entertain the application in question.

"Signed { C. MORTON ANDERSON.
L. S. MANNING.
GRAHAM CAMPBELL."

To this an answer had been received, pointing out that the question was one that lay between the Lodge and its medical officers. Subsequently, however, a deputation from the Lodge waited on Dr. Irving and informed him that the candidate was prepared to promise that he would not apply for medical benefits. On this, Dr. Irving had agreed to examine the candidate, the promise to be in writing. It was decided that full publicity should be given to this matter.

Drs. Bolger and Diamond were elected to the vacancies on the Committee of Management.

Dr. FAIRMAN exhibited a boy, aged six, who had had influenza two years ago and afterwards lost power in the left arm and leg. The left thigh was one inch less in circumference than the right, and the left arm displayed similar wasting.

Dr. FAIRMAN also showed gall-stones removed after death from a lady, aged 75, who never had any symptoms pointing to biliary calculus.

Dr. CAMPBELL read a paper on "Secondary Laparotomy for Ovarian Tumour"—a very interesting case which had been originally operated upon by Lawson Tait. Dr. Campbell exhibited the tumour.

Dr. FENWICK showed specimen of a two-months' foetus, and asked the President's permission to lay a case before members with a view to obtaining their assistance towards arriving at an accurate diagnosis.

Dr. THOMAS referred to the question of "Dental Anæsthetics," and it was decided to bring it forward at the next meeting.

OTAGO SECTION.

A meeting of the Otago Section was held on February 4, 1898.

A letter from Dr. Graham Campbell, General Secretary for New Zealand, was read, intimating that the Otago Section were entitled to two delegates, and emphasising the changes in subscriptions arranged for New Zealand members, viz., 30s. if members take the *British Medical Journal* but do not take the *Australasian Medical Gazette*; 45s. if both journals are taken.

The date of the Annual General Meeting of the N.Z. Branch has been fixed for March 12th next.

The printed by-laws of the Otago Section, N.Z. Branch, B.M.A., were distributed amongst members.

At the instance of Dr. BATCHELOR, it was decided to order the "Johns Hopkins Medical Reports and Bulletin" for the library. The 1896 volumes were kindly presented to the Section by Dr. Batchelor.

Dr. CLOSS brought forward for discussion the question of the Dunedin Benevolent Institution advertising for a medical officer at a slightly higher rate than that hitherto paid, but greatly increasing the duties. The salary paid to the medical officer (Dr. Closs) for the

last three years has been £70 per annum, and for this he has been obliged to attend at least once a week, and frequently two or three times a week, at the institution; attend also confinements which present any difficulty, and outdoor cases as occasion arises. The trustees of the Benevolent Asylum are now advertising for a medical officer at £75 per annum, at least three visits per week to be regularly made, together with the other duties as stated above. Dr. Closs stigmatised the action of the trustees as an attempt to sweat the medical profession.

Several members thought the salary inadequate, but the discussion led to no action being taken.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary Monthly Meeting of the above Branch was held on February 24th, 1898. Present: The President (Dr. Giles). Drs. Swift, Lendon, Fischer, A. E. Wigg, Cavenagh-Mainwaring, Harold, Morgan, Michie, and the Hon. Sec. (Dr. W. T. Hayward).

Minutes of last meeting confirmed.

E. Angus Johnson, M.B., B.S. Melb., was elected a member of the Branch.

Owing to the small attendance resulting from the extreme heat of the weather, Dr. SWIFT moved,—"That the meeting be adjourned till next month." He suggested that it would be advisable that the Branch should go into recess during the months of December, January, and February. Dr. MICHIE seconded. Carried.

PROCEEDINGS OF OTHER SOCIETIES.

BALLARAT DISTRICT MEDICAL SOCIETY.

THE ordinary Quarterly Meeting of the above Society was held on Thursday, January 27, at 8.30 p.m. Present: The President (Dr. Salmon), Drs. Affleck Scott, Beattie-Smith, Champion, Courtney, Gutheil, Pinnock, Richards, Usher, and the Hon. Sec. (Dr. Mitchell); Dr. Lethbridge was also present as a visitor.

Apologies were read from Drs. Cussen, Morrison, and B. Scott.

Correspondence was received from Mrs. Whitcombe, thanking the Society for their kindness in placing a railing around her late husband's grave.

Accounts to the amount of £8 15s. 8d. were passed for payment. The sum of £1 ls. was voted to the Baron von Müller Grave Monument Fund.

A letter of condolence was ordered to be sent to Dr. Jordan, ex-President, sympathising with him in his recent bereavement.

Communications having been received from the Victorian Branch of the British Medical Association and from the Medical Society of Victoria suggesting that this Society should unite with one of the larger Societies, the matter was considered at length. The relative advantages of both Societies were fully explained, and it was unanimously resolved that a sub-committee, consisting of the President, Vice-President, and Hon. Secretary, be appointed to confer first with the Hon. Secretary of the Victorian Branch, B.M.A. It was felt that it would be in the interest of the Society to amalgamate with the parent association rather than a local society, and a strong hope was expressed that it might be possible to make satisfactory arrangements to this end.

Dr. COURTNEY read some "Notes on Midwifery Cases" (to be reported later), in which he showed some of the difficulties of a lonely country practitioner in this class of work. An interesting discussion followed, in which Drs. Pinnock, Usher, Mitchell, and the President took part, and Dr. Courtney responded.

Dr. BEATTIE-SMITH then read an extremely interesting paper on "Folie a Deux," or associated insanity (to be reported later). It was richly illustrated with reports of cases, and was highly appreciated by the members present, who, however, felt that they were scarcely in a position to discuss it till they had had an opportunity of reading it at leisure.

A vote of thanks to the chair closed the meeting.

THE MEDICAL DEFENCE ASSOCIATION OF VICTORIA, LIMITED.

THE third annual meeting of the Medical Defence Association was held at 117 Collins-street on Thursday, 24th February, at 8.30 p.m.

Present:—Drs. Syme (president), G. Howard (vice-president), F. J. Owen (hon. treas.), McAdam, W. H. Owen, Hamilton, Walsh, Rowan, Argyle, Henry, J. A. Sutherland, W. K. Hughes, Lethbridge, T. J. W. Kenny, D. Turner, R. T. Sutherland, and Eugene Anderson (hon. sec.).

The minutes of the last annual meeting were read and confirmed.

ANNUAL REPORT.

The Council has much satisfaction in presenting the third annual report of the Association, with its congratulations on the progress made during the past year. A great deal of steady work has been done, and a large variety of subjects has been dealt with in full Council, by sub-committees, and by deputations. The Defence Association has now such an assured position that it is relied on by the medical profession generally to deal with all matters affecting its members, and the Council trusts that you will credit it with having worked with one great object in view—the care and advancement of all medical interests.

Though not called on actually to defend any action brought against a member, the Council was able to render valued assistance to two of our members. One of these had an action to defend, the cause of which occurred before he joined the Association, and Dr. Hugh Boyd is to be heartily congratulated on the successful issue of that harassing and expensive action. This case served to bring your Association prominently before the public, and the Council would take this opportunity of impressing upon the community that its object is Defence, and not Defiance. In consequence of certain strictures passed at the time in this case, it may be pointed out publicly that it is only in *approved* cases, after the fullest consideration by the Council, that any advice or assistance is granted.

Another medico-legal case was before the courts during the year, when great regret was expressed that the defendant was not a member of the Association, so that he might have been assisted morally and materially.

The scale of fees drawn up by your Council, and referred to in the last report, has been adopted by the three Medical Societies, and then finally re-passed by the Council. It is now the recognised standard scale for the colony. Arrangements are now being made for its being printed, and a copy will shortly be in the hands of every member of our profession.

The Attorney-General consented, as the result of the representations of the Council's deputation on the subject, to exempt our Association from certain harassing

clauses of the Companies Acts while he remained in office.

During the year a memo. was sent out to the profession in Victoria pointing out the advantages to be gained individually and generally by joining the Association, and this appeal met with a hearty response. Members also received, in handy form, the privilege clause of the Evidence Act, which protects medical men in the witness-box from divulging information given to them under the pledge of professional secrecy; also, on the same leaflet, a notification was made that indemnity lunacy certificate forms could be obtained by any member on application, thus minimising the risk run by every man who signs, however conscientiously, a lunacy certificate.

The Crown Law Department has, at the instigation of the Council, sent out to all Clerks of Courts and similar officials a notice that the Scotch, or sanitary form of oath, may be adopted by any witness (with instructions for its administration) instead of the insanitary and highly objectionable custom of saluting a polluted copy of the Sacred Writ.

The hon. treasurer shows a satisfactory condition of the funds, and during the year a portion of them was placed on deposit in the Savings Bank. The heaviest part of the expenses has been the printing and postage, but everything possible has been done, consistent with a due regard for progress, to conserve the funds and build up a strong reserve for the heavy expenses which may any day arise.

FRIENDLY SOCIETIES.—The relations of the profession to these have not been overlooked, and the whole of the medical officers of the A.N.A. were called together under the auspices of our Association. The result was a deputation which conferred with their executive, and obtained some satisfactory concessions in the medical agreement where some startling innovations were suggested, though afterwards abated as the result of the conference. Looking ahead, your Council will strenuously urge the adoption of fairer terms by all the societies, and the removal of many anomalies and forms of injustice.

An important question of medical ethics was submitted to the Council during the year, with the consent of the two practitioners involved, both of whom were and are members of the Association. The case was fully considered by both a sub-committee and by the whole Council, resulting in an award which, it is trusted, amicably settled a serious difficulty, and some suggestions were made which members may have on application to the secretary, and which might with advantage be incorporated in future agreements for sale or transfer of practices, and thus tend to prevent disputes.

INCREASE OF MEMBERS.—One of the most satisfactory matters in 1897 was the large number of new members, of whom 90 were elected, in comparison with 16 for 1896. A hope was expressed in last report that the numbers would be doubled in the ensuing year, and this result was actually obtained, the membership going up by leaps and bounds, from 89 at the close of 1896, to 179 at the end of December, 1897, while on the present day we have the proud record of 196 members. Gratifying as it is to be able to report this great increase, your Council realises what numbers there are still to be gathered in, and asks the active assistance of every member in his own particular district or sphere, so that it may be able to report a still greater increase for 1898. The advantages of joining the Medical Defence Association should only require to be brought before any medical man for him to at once sit down and fill up an application form.

DEPUTATION TO THE PREMIER.—The statements by Dr. Roddick, president of the B.M.A. annual meeting in Montreal in 1897, showing the results of federation in Canada from a medical point of view, necessarily came before the Council, and though there was no desire to overlook the University Council, still in the absence of any movement on their part, the Council waited on the Premier to confer with him as to what would be the position of colonial Graduates in Medicine as regards recognition in Great Britain if federation became an accomplished deed. On the Premier's advice the Council wrote to the secretary of the General Medical Council in Great Britain, asking him to cable if the interests of Victorian graduates would be prejudicially affected in the event of federation, but as no cable has been received in reply, it may be assumed that federation will not interfere with the rights (only recently granted) to practise in Great Britain with a colonial diploma. The Premier was of the opinion that it would not be feasible at present, as was urged by the deputation, to bring before the Federal Delegates the question of the establishment of a Federal Medical Council on the lines of the General Medical Council.

Professor Allen has recently written to both the Premier and your Council stating that the University Council sees no reason—should the colonies become federated—for anticipating that the medical and surgical degrees of the University of Melbourne will in any way suffer in esteem, or that the recognition which is at present given to those degrees will be taken away by the recognised medical authorities in Great Britain.

CANVASSING DOCTORS.—In December a circular was sent out to members of the Association asking them not to meet in consultation any man who carries on a canvassing practice.

ABUSE OF HOSPITALS.—This question, now being considered so fully at home, has been before the Council, which advises that this be one of the first matters to be considered by the new Council. There is no doubt that hospitals are largely abused in every part of the colony; and this question is one which so intimately concerns the profession that it deserves the fullest consideration by the Medical Defence Association.

NOTIFICATION OF INFECTIOUS DISEASE.—After some correspondence, a deputation from the Council waited on the Central Board of Health to ask that the present absurdly low and inadequate fee of 1s. for reporting infectious cases should be raised to at least 2s. 6d. The members of the Board seemed to be of opinion that a strong case had been made out, and although the Board has not yet come to a decision, it is probable that the fee will be raised. The increase of fee thus gained will many times pay the small membership fee of the Association.

APPOINTMENT OF A SPECIAL REPRESENTATIVE.—In June last it was decided to be advisable to appoint some gentleman to aid us by canvassing the profession for new members and collecting any outstanding subscriptions. Mr. J. E. Barlow, of 49 Elizabeth Street, was the chosen one, and he has been well received by the profession, many of whom have joined our ranks owing to his representations, and we may safely say that the connection has been mutually satisfactory.

It is the intention of the Council to appoint a local hon. sec. in each large centre; and, as a first step in this direction, Dr. Hugh Boyd, of Bendigo, has consented to act, and has been appointed local hon. sec. for that city and district.

MEETINGS OF COUNCIL.—Eighteen meetings were held of the full Council, the attendances being as

follows.—Dr. Syme, President (14), Dr. Howard, Vice-President (12), Drs. Adam (1), Brett (12), Daish (12), Hamilton (14), Jamieson (10), McAdam (13), Hall Owen (10), F. J. Owen, Hon. Treasurer (18), and Eugene Anderson, Hon. Secretary (15).

In addition there were eight Sub-Committee and Deputation meetings, with very full attendances.

The three retiring members of Council (Rule 29) are—Drs. Rothwell Adam, J. Jamieson, and Hall Owen, who are eligible for re-election.

The accompanying audited Balance Sheet is for the information of members, who are reminded that the annual subscription (10s.) is now due, and should be

forwarded at once to the Hon. Treasurer, Dr. F. J. Owen, Brunswick Street, North Fitzroy.

The Council desires to impress on members that no privileges can be availed of unless subscriptions were paid at the time when the complaint or injury arose; also, that prompt payment not only ensures full membership, with its privileges, but saves expense to the Association.

Forms of application for membership may be obtained at the annual meeting, or from any member of the Council; from the Special Representative, Mr. J. E. Barlow, 49 Elizabeth Street; or from the Hon. Sec., Dr. Eugene Anderson, Burwood Road, Hawthorn.

THE HON. TREASURER IN ACCOUNT WITH THE MEDICAL DEFENCE ASSOCIATION OF VICTORIA, LIMITED,
FOR THE YEAR ENDING DECEMBER 31, 1897.

RECEIPTS.		EXPENDITURE.	
To Balance from 1896	£47 13 0	By Stamps, Stationery, Guarantee Premium, Registration Fee, &c.	£26 2 6
" 166 Members' Subscriptions paid	£83 0 0	" Postages and Circulars to A.N.A. Members	4 17 9
" 12 Members' Arrears for 1896	6 0 0	" Stillwell and Co.'s Account, Printing Notices of Meetings—Rules, Circulars, &c.	11 12 0
" 2 Members' Subscriptions in advance	1 0 0	" Rent to June 1st (12 months)	3 0 0
" Exchange on Cheques	0 3 0	" Commission	5 15 4
	90 3 0	" Exchange on Cheques	0 3 6
		" Balance in Union Bank	£45 14 11
		" " Savings Bank	60 0 0
		" Cash in hand	0 10 0
			106 4 11
	£137 16 0		£137 16 0
ASSETS.		LIABILITIES.	
By Balance in Union Bank	£45 14 11	Nil.	
" " Savings Bank	60 0 0		
" Cash in hand	0 10 0		
" Subscriptions unpaid, 9 (one year), 2 (two years)	6 10 0		
" Reserve Guarantee—167 Members @ £1	£167 0 0		
11 " various amounts	39 7 0		
	206 7 0		
	£319 1 11	To Balance	£319 1 11

Audited and found Correct, 11th February, 1898.

F. J. OWEN, M.D., Hon. Treasurer.

P. B. BENNIE, M.D.

It was resolved that the report be taken as read.

Dr. Henry, in proposing its adoption, congratulated the Council on its work for the year. Dr. Lethbridge seconded this motion, and in putting it the President (Dr. Syme) mentioned some matters not included in the annual report, viz., the action of the Council in endeavouring to obtain the appointment of a Medical Coroner; that the Council had already taken action with a view to obtaining payment for P.M.'s and evidence for the Resident Medical Staff of hospitals, and had endeavoured to obtain increased mileage fees for medical work on behalf of the police, but so far without success. The report was then unanimously adopted.

The balance sheet showed a healthy state of the finances, the balance being £106, as compared with £47 at the end of 1896. It was adopted on the motion of Drs. Walsh and R. T. Sutherland.

The Hon. Sec. pointed out the large increase of members during the year, the numbers having gone up from

89 to 200, and it was confidently expected that a similar increase would be found in 1898.

Drs. Jamieson and Hall Owen were re-elected to the Council, and Dr. P. B. Bennie was elected to fill the other vacancy on the managing body. Dr. Argyle was elected hon. auditor.

A special meeting of the Council was held immediately after the annual meeting, when the following were elected office-bearers for 1898:—Drs. Syme, Howard, F. J. Owen, and E. Anderson were re-elected to the respective positions of President, Vice-President, Hon. Treasurer, and Hon. Secretary.

A hearty vote of thanks was then passed by the Council to the Hon. Sec. for his active work during the past two years.

It was resolved to appoint local hon. secs. at once in the different centres of Victoria, and a list was prepared of members to be asked to accept such positions in their respective districts.

MEDICAL SOCIETY OF QUEENSLAND.

THE 134th General Meeting was held on March 8th, 1898, in the Society's rooms.

Present: Dr. Wheeler (President), Drs. Taylor, Robertson, Carvosso, Moloney, Little, Lillian Cooper, Hardie, Love, Byrne, and Turner.

The PRESIDENT welcomed Dr. Little, an old member, and ex-President of the Society, on his return to Queensland.

DISCUSSION ON DENGUE FEVER.

The PRESIDENT opened a discussion on Dengue fever.

Dr. WHEELER, in opening the discussion, said that there appeared to be two variations of the disease; in one the onset was quite sudden, and the greatest severity was during the first three days, after which there was a regular progress to recovery; and in the other the onset was gradual, the patient being only moderately ill for the first three or four days, after which the symptoms became rapidly more severe, and remained so for from two to four days. The character of the rash was very variable, and in one case was in the form of urticarial patches of very large size. He had in several cases seen the initial fugacious rash, the presence of which had been denied by some writers. It was in the character of a faint blush all over the skin, which only lasts for a few hours and then fades away. In addition to these cases, which presented the usual distressing cephalic and sacral pain, a considerable number were affected with very severe abdominal pain, which caused troublesome vomiting. His treatment was to encourage the rash by sudorifics, while for the headache and pains he used phenacetin, antipyrin, and caffeine; and for the general condition he found a mixture of ammonia and cinchona very useful.

Dr. ROBERTSON: The epidemic had been very widespread in Ipswich, hardly a house escaping. From 70 to 80 per cent. of the population must have been attacked. The majority of cases belonged to the type described by Dr. Hare as remittent; the intermittent form was less common. The most frequent complications were—(1) marked abdominal pains, sometimes epigastric, sometimes iliac, lasting several days; (2) hæmorrhages, in several cases epistaxis, in one case hæmatemesia, in one doubtful phthisical case hæmoptysis; menorrhagia was not infrequent; (3) scanty, high-coloured, bloody urine, sometimes suppression for twenty-four hours, with severe pain in the back. For treatment of the headache and pains he gave antipyrin and spt. ammon. co. He had also given salicylates and bromides with success. Diet in severe cases consisted of soups and milk with soda-water. He thought when the rash came well out the symptoms were, as a rule, less severe. He believed that the pains were in the nerves, and of the nature of neuritis. This seemed to be confirmed by one case in which both pain and rash were restricted to one flank.

Dr. CARVOSO thought the percentage of cases had been quite as high in Brisbane. Children as a rule escaped very lightly. Many could be seen running about with a rash developed. Severe cases were rare in children. As a general rule the severity increased with age, and the worst cases he had seen were in elderly people. From this statement must be excepted two of his worst cases, which occurred in women who had been recently confined. In both the temperature reached a height of 105°, but fell after the administration of salicylate of quinine. The rash was very variable, and sometimes absent. He agreed that cases do better when the rash comes out well. These

cases make a better recovery, and are less liable to relapse. In three or four cases he had seen enlargement of the sterno-mastoid glands. Pains occurred in the head and back, and round from the situation of the kidneys to the front of abdomen. Pains in the limbs were also very severe sometimes.

Dr. LOVE: This was really the third epidemic of Dengue in Brisbane, and the third which had spread all over the colony. The first was in 1896, the second in 1896, and the third started in October last, reaching its height in January and February. It was now subsiding, probably from lack of victims. Probably 80 per cent. of the population had had the disease. "No such dislocation of commerce and business had taken place from any epidemic."—(Daily press.) The Registrar-General had recorded the following number of deaths from Dengue fever:—In Brisbane district 18 deaths had occurred from May to August inclusive, 1897, and nine deaths to date during the present epidemic, though it had been much more widespread. The majority of deaths in Brisbane occurred from hyperpyrexia, in Northern Queensland from collapse. He had seen only one of those cases of collapse in children such as were described by Dr. Hare. This case had such severe collapse, combined with abdominal pain, as to suggest intussusception. Although almost despaired of it eventually recovered. Partial immunity was produced by an attack, but relapses and second attacks were not uncommon. If the rash came out early (third or fourth day) the case was a mild one. If a good rash came out no relapse followed as a rule. He had seen three attacks in one patient with intervals between of 10 days and three weeks. The temperature of 103° was, as a rule, the highest attained, and this occurred commonly on the first day, and on the last day, when the crisis occurred. The sequelæ pointed to nerve poisoning; for instance, slight neuritis, causing intense irritation in palms and soles; less commonly, well-marked neuritis, in one case of the ulnar nerve, with cutaneous blisters, in another supra-orbital herpes. He had also seen a case of motor paresis of all four limbs. Again, he had been informed of cases of paraplegia and of paralysis of all four limbs, and in one instance this was followed by death from respiratory paralysis. He had known melancholia to follow Dengue. In three cases there had been hæmoptysis without indications of phthisis. Difficulty and tenesmus in micturition sometimes occurred. Muscular rheumatism of scalp and neck muscles, lumbago, and sciatica sometimes occurred as a sequelæ, and for this he found the Turkish bath most beneficial. He had seen undoubted Dengue followed by typhoid without intermission. As to treatment he advised to keep the skin acting, so as to develop the rash. Rest in bed, hot drinks, phenacetin, caffeine, and salicylates were indicated. Phenacetin must be given with caution, or avoided when the crisis was expected.

Dr. MOLONEY thought Davidson's description corresponded to the disease met with in Brisbane. He generally gave calomel at the beginning, and then quinine. For the head symptoms antipyrin and cold sponging.

Dr. HARDIE thought the subject had been almost exhausted. He wished to call attention to one point only, the great resemblance between the symptoms of Dengue and Influenza. In both there occurred headaches, severe pain in eyes, back-ache, pain all over limbs, and fever. The differences were—(1) In Dengue an initial rigor was more common; (2) In Dengue a rash was present in the majority of cases, in Influenza it was uncommon; (3) In Influenza there was commonly a certain amount of catarrh of the air

passages, which was absent in Dengue; (4) in Influenza pulmonary complications, especially bronchitis and pneumonia, were common, in Dengue almost unknown; (5) they responded differently to treatment—in Influenza salicylate alone, or with antipyrin, usually relieved the pains within 12 hours, in Dengue relief was not nearly so certain. He began treatment with a hot bath or pack, then gave salicylate to keep the skin acting; often, also, antipyrin, antifebrin, or phenacetin. During convalescence Easton's syrup was most useful.

Dr. COOPER had seen a case of Dengue without fever. There were severe pains in the thighs, which resisted all treatment until morphia was given. After some days a profuse urticarial rash, resembling that seen in some cases of Dengue, supervened, and then symptoms began to improve.

Dr. TURNER stated that the increased experience of the disease had enabled him to come to the conclusion that the disease was really identical with the Dengue of the West Indies and other tropical countries, which had at one time appeared to him doubtful.

Dr. WHEELER, in summing up the discussion, alluded to one or two points which had been omitted. (1) The pulse relation to the temperature was abnormal. Often a slow pulse (88-96) occurred, though the temperature reached 104°. (2) There was a perversion of taste often distressing, leading to complete anorexia, and lasting five or six days after temperature was normal. Patients complained of a sweetish, bitter, or putrid taste. (3) When the rash was faint a relapse always occurred, and relapses were often worse than the first attack. When the rash was well developed there might or might not be a relapse.

LETTERS TO THE EDITOR.

NEW TRUSS FOR INGUINAL FEMORAL HERNIA.

(To the Editor of the Australasian Medical Gazette.)
SIR.—Might I call attention to one or two points in Dr. Macdonald's letter? The truss, he writes, "consists of the usual steel band." Apparently, from the picture, this steel band has the common fault of being in the form of a circle. This does not adapt itself to the shape of the pelvis with that accuracy which is so necessary for a well-fitting truss in the adult. It is quite wrong to make up for other defects by producing strong inward pressure by means of a pad. It is the question of "fitting," not of pressure, that is at fault. A simple truss is the best. A well-fitting truss in these colonies is a very rare sight in either children or adults. Surgeons nearly always send patients to the instrument makers, and never check their work. So long as such is the case, so long will trusses fit badly and cease to give satisfaction.

Yours, &c.,

Melbourne.

W. KENT HUGHES.

BATTLE OF THE CLUBS.

(To the Editor of the Australasian Medical Gazette.)
DEAR SIR.—It seems advisable to lay before your readers the circumstances attending the rupture between the profession here and two of the Friendly Societies, viz., the Oddfellows and Hibernians. About eight months ago the united lodges requested a reduction in the rates of charges all round. These had been

20s. per annum per member for attendance, being the price prevalent in the Western districts, 5s. per mile over three miles one way, two guineas accouchement fee, recoverable by the doctor himself, except in the case of the Foresters. The profession here refused to reduce from this. Nothing further was heard till the middle of December last, about the 14th or 16th, when the Oddfellows presented an agreement for signature of such a nature that we refused and put in one of our own, which was nothing more than that of the Foresters' Court, which we considered fair, and were quite willing to stand by. The Oddfellows and Hibernians refused this, and advertised for tenders for two medical men to have the privilege of their practice.

The case now stands thus:—We refuse to take any lodge that does not put in its agreement that we are not to be called on to attend any children of a member's family above 17 years; which does not strictly distinguish between the mother of a single member dependent on him or not dependent on him, and residing with him; and which does not either guarantee the fee for accouchement, or provide for its payment on engagement or at accouchement.

At present any two men coming here will come to a field which has ten medical men within a radius of 2½ miles, five of whom are in Orange itself, where none of them can be said to have too much to do, considering they serve a population of less than 6,000, so that private practice does not give much promise of remuneration. Then they will have, say, 300 members, or at most 500, supposing all the clubs, six in number, unite (a most unlikely contingency, as the Foresters, the largest lodge, are most unlikely to join the two recalcitrant lodges at present fighting the doctors).

Does this prospect seem inviting enough? A goodly number of club members are in the country and not averse to taking the doctors out four miles for 5s. one way for trivial reasons, so a trap and horse are indispensable, and that means a groom. Thus expenses will be great, and this on say £150 per annum each man does not seem particularly rosy. It must not be forgotten that these lodges mean, if possible, to cut the remuneration down from 20s. to 16s., meaning £120 only per man, and if they found anybody prepared to accept servitude with them under present conditions they will probably be encouraged in trying later to put the screw on their confiding victims. Another point is that many members of the contending lodges propose leaving them and joining the Foresters. Such in brief is the situation.

I remain,

Yours sincerely,

G. A. VAN SOMEREN.

28th January, 1898.

At the annual meeting of the Sydney Hospital, held on the 22nd ult., a new Pathological Department was opened by his Excellency Lord Hampden. A description of the department will be found on page 132 of this issue.

COMPRESSED DRUGS FOR GYNÆCOPATHIC USE.—We have received from Messrs. Burroughs, Wellcome and Co. specimens of their Soloid Compressed Drugs, i.e., Zinc and Tannin Compound, Sodium Biborate Compound, and Alum Compound, for the instant preparation of irrigations. Drugs in this form possess many advantages over the ordinary powders in the treatment of abnormal discharges, whether from the uterus, vagina, or vulva, as a regular and systematic irrigation is ensured, a result to be welcomed by both physician and patient.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, Queensland, South Australian, Victorian and New Zealand Branches Free of Cost.

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SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 21ST MARCH, 1898.

EDITORIALS.

THE NEW PATHOLOGICAL DEPARTMENT, SYDNEY HOSPITAL.

THE enormous strides which have of late characterised the progress of Pathology and Bacteriology have emphasised in a marked degree the daily increasing importance of a thorough acquaintance with these sciences in

order to a correct elucidation of diseased processes.

Recognising this fact, the Directors of the Sydney Hospital have determined that their institution shall in no sense be behind the times in this respect.

In order to carry out their views, it became necessary some six months ago to make considerable alterations and additions to the Department in which, till then, the pathological work of the Hospital had been carried out.

These alterations and additions have been executed in a very thorough manner, without any regard to expense or trouble; in truth, it may be said that the whole work plainly shows that utility has in no way been sacrificed to economy.

The Department, which formerly consisted of a *post-mortem* room and a mortuary, now comprises a series of eight rooms.

The new buildings are so arranged that the whole of the ground-floor is devoted to Morbid Anatomy, while the upper story, consisting of five rooms, is devoted to Histology, Bacteriology, Chemistry, and Photography.

The three rooms on the ground floor consist of a *post-mortem* room, a mortuary, and an inspection room. These three rooms all communicate directly with one another—the mortuary being placed between the *post-mortem* and inspection rooms.

All of these rooms are provided with tiled flooring, and the walls with white glazed tiles to a distance of 6 ft. from the floor; and, as careful provision has been made for an abundant supply of water, the task of keeping everything as clean as it should be will be a light one.

The *post-mortem* room is well-ventilated and capacious.

It contains two *post-mortem* tables, constructed of iron and slate, revolving on a stout iron pedestal let into the floor, with a central discharge pipe opening over a well-trapped drain.

In addition to this there is a large slate tank, 6 ft. long by 1½ ft. wide, in which organs are placed while their examination is being conducted. A small raised platform placed opposite this, and provided with a double row of seats, affords accommodation for visitors or students.

The mortuary has been, of a purpose, made of small dimensions, and is situated between the *post-mortem* room and the inspection room.

A stout frame-work of iron gaspipes and wooden uprights stands in one corner of this room, and provides accommodation for eight bodies placed in two rows, one above the other.

By this means provision has been made for a thorough ventilation of the bodies while awaiting burial.

A small trolley on six small rubber-capped wheels is used for removing bodies either into the *post-mortem* or inspection rooms.

The third room of this series has been set aside for viewing purposes, either by friends and relations of the deceased, or by juries on Coroners' inquests.

Communication with the upper floor is made by means of a staircase at the northern end of the building.

The general histology room is a fine, spacious, well-ventilated chamber 30 ft. long by 18 ft. wide, with windows facing both north and south. Here, benches with gas-points and water-basins provide accommodation for seven workers.

These benches are also well equipped with cupboards, drawers, and shelves for the accommodation of reagents and apparatus.

Side by side with this room is a smaller one fitted with cupboards, shelves, benches, &c., for the use of the Director of the Department.

The bacteriological room is one of the chief features of this department. Its floor is composed of tiles, resting on a foundation of steel girders with concrete between. This room is lighted from the roof, as well as on the eastern and western sides. Stout slate benches, with upright slabs, to cut off currents of air, are situated at the northern and southern ends of the room. On these stand the incubators, steam and hot-air sterilizers, inspissators, &c., necessary for the manufacture of nutrient media, and the culture of organisms. A bench along the eastern wall is provided with a large sink for cleansing the glass apparatus used in growing organisms.

A room on this floor has been set aside for chemical examinations. This room has a bench running along its eastern wall, furnished with a sink and a draught chamber.

The other room in the department is to be used for the accommodation of the Röntgen Ray apparatus, so liberally presented to the Institution by Dr. F. H. Quaife.

All the rooms in the upper story of the building communicate directly with one another, and indirectly by means of a balcony running along the western wall.

By this arrangement access may be had to any single room without the necessity of passing through any of the other rooms.

The building has been constructed by Mr. Fanning, and has been completed in a thoroughly workman-like fashion.

The work of the department will be carried on by Dr. Sydney Jamieson, assisted by Dr. Isbister.

An adequate conception of the arrangements of the department can only be obtained by a personal visit, and with this view members of the profession are cordially invited to pay a visit of inspection.

THE LAUNCESTON (TAS.) HOSPITAL QUESTION.

THE medical men of Launceston are dissatisfied with the action of the Hospital Board in refusing to make any alteration in the system of the Hospital management, and the Launceston Branch of the B. M. Association has held a meeting to discuss the matter. After discussion it was agreed by a majority, "to ask the Hospital Board to meet with the medical men in conference."

In the event of the Board refusing, or no definite action taken to accede to the wishes of the medicos, the Association will then seek the aid of the Medical Society in Hobart, with a view of bringing the whole matter of Hospital management in the colony before Parliament.

LETTERS TO THE EDITOR.

PROFESSOR SCHENK'S THEORY.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—Professor Schenk's theory, accounts of which have lately appeared in the daily papers, opens up questions of interest both to the general public and the man of science. There have in the past been many theories dealing with sex. At the beginning of the last century they were estimated at 500, and they have gone on increasing ever since. As they have all, without exception, proved unsatisfactory, it cannot be wondered at if Professor Schenk's is received with much scepticism. Till a full statement of his theory is given to the world, it is impossible to state what likelihood there is of it proving an exception to what has hitherto been the rule. But, in the meantime, one or two observations may be of interest.

As is well known, bees and ants possess the power of determining whether a given larva shall develop into a queen or a worker. For the first few days the larvae are all fed alike, after which only those destined to become sexual forms continue to receive the nutritive food, the others either getting none or very little. Now the question is: How is it that a difference of food can decide which form the insect is to be? Professor Weismann answers that it is owing to there being the primary constituents of two distinct reproductive systems—*e.g.*, those of the queen and worker—in the germ-plasm of the egg, and that it is the food which determines which of the primary constituents shall be stimulated into developing. Thus, if the food is rich and plentiful, a queen will develop, if poor and scanty, a worker.

Now, if Professor Weismann is correct (and there are many facts in his favour), there appears no *a priori* reason why Professor Schenk should not be able to do what he claims to have done. Supposing there are two sets of primary constituents in the germ-plasm of the ovary—*e.g.*, those which give rise to the male organs and those of the female—then it does not appear impossible that suitable treatment might be able to determine which set should develop. Of course this is far from saying that Professor Schenk is correct. Time and much research can alone decide that.

I am, Sir,

Yours truly,

ERNEST NEWTON.

20 Burnett Street, St. Kilda, Melbourne,
February 21, 1898.

A QUESTION OF A MEDICAL FEE.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Will you kindly advise me in the following case in your next issue?

In December last I was requested, verbally, by a man to attend his wife in her confinement, which was expected to occur in February.

I was at home at the time the event came off, and my services were available, but owing, so I am told by outsiders, to the opposition of the nurse, another man was called in. The said nurse threatened to leave the house if I were sent for, and thus frightened the husband.

I have never met the nurse, but the other medico has resided in the district some years, and is well known to her.

The husband has not had the grace to come near.

Am I entitled to any fee?

I am, Sir,

Yours faithfully,

MEMBER B.M.A., VIOT. BRANCH, TAS.

4th March, 1898.

[Some question may arise with regard to verbal agreements with reference to accouchement cases, unless made before witnesses. It would be well that such arrangements should be made in writing, in which case the fee arranged for should be paid in the event of the practitioner not being sent for when required. Some accoucheurs insist upon half the fee being paid at the time of engagement. We are afraid that our correspondent has no redress in case of the repudiation of the agreement, as in a lawsuit the whole matter would depend on his word against that of the defendant. The action of the nurse, if proved to have been such as stated, is highly reprehensible.—ED. A. M. G.]

KOCH'S NEW TUBERCULIN.

(To the Editor of the Australasian Medical Gazette.)

DEAR SIR,—Would any gentleman kindly let me know personally or through the columns of the *Gazette*, his experience in Australia from the use of Koch's New Tuberculin. Firstly, as to cure; secondly, as to immunity. Its diagnostic value seems proved.

I am, dear Sir,

Yours truly,

HENRY S. MAW, L.S.A. Lond.

Med. Gov. Officer,
Tumbarumba, N.S.W., March 7, 1897.

PUBLIC HEALTH.

Typhoid fever is still very prevalent at Beaconsfield, Tasmania.

The N.S.W. Government, acting on the recommendation of the Board of Health, has appointed two medical officers of health—one for Sydney and its neighbouring suburbs and towns, including Parramatta, and the other for Newcastle and towns in the Hunter River district. The former is known as the metropolitan combined districts, and the latter as the Hunter River combined districts. Dr. William George Armstrong has been appointed to the metropolitan combined district at a salary of £750 a year. To the Hunter River combined district Dr. Robert Dick has been appointed at an annual remuneration of £700. The appointments are made under the Public Health Act. The metropolitan combined district includes Sydney and its suburbs, and also Granville and Parramatta. The Hunter River combined district includes Adamstown, Carrington, East Maitland, West Maitland, Hamilton, Lambton, New Lambton, Merewether, Morpeth, Newcastle, Plattsburg, Raymond Terrace, Stockton, Wallsend, Waratah and Wickham.

A deputation from the Medical Defence Association of Victoria waited upon the Board of Public Health on February 9 to protest against the low fee allowed to medical practitioners for reporting cases of infectious disease. Dr. Anderson, secretary to the Association, introduced the deputation, stating that the medical men of the colony were unanimous that the present remuneration was very inadequate. If cases of infectious diseases were not reported, liability to a heavy fine was incurred, and yet the fee was now 1s., having been reduced from 5s. The deputation protested against this shilling fee, as being beyond all fairness. Victoria stood alone in offering such a rate of pay. The Sydney department give 3s. 6d. per case, and Adelaide 5s. In Great Britain the general scale was 2s. 6d. The time, trouble, and responsibility involved called for better recognition than 1s., especially as two reports of each case had to be furnished. It was asked that a rate be fixed half way between the two extremes of 5s. and 1s. Dr. Grasswell, in reply, said he was unaware that more than 2s. 6d. had ever been paid—at any rate no more had been paid since the existence of the Board. He knew of nowhere in the world where a notification fee of 5s. was paid. In regard to South Australia, there was no notification Act, and the 5s. fee was for the reporting of a special class of exotic diseases. As for the Sydney rate, it could not be said how long the 3s. 6d. would obtain. Victoria was well in advance of the other colonies in these matters, and they were gaining by our experiences. The only sound basis, it appeared to him, was the general scale prevailing in England, where the fee was 2s. 6d. The notifications, however, were of great value, and, personally, he felt the present fee in Victoria was a small one. He would suggest that the Association place their views before the Board in writing, giving as many additional facts and data as possible, when the matter would be fully considered. The deputation then withdrew.

Dr. Gregory Sprott, Officer of Health, Hobart, Tas., reports that during the month of January there were 64 deaths registered in the registration district of Hobart, but seven of these were of persons not usually resident in the district. In the city there were 36 deaths as compared with 42 during the corresponding month of last year, giving a death rate equal to 14.76 per 1,000 per annum. The principal causes of death were:—Typhoid 3, diarrhoea 3, enteritis 5, infantile

debility 4, phthisis 1, tuberculosis 2, cancer 1, old age 3, disease of the heart 3, and the remainder were of a general nature. Of the 86 deaths 13 were of persons under one year of age. There were 67 births registered; in the city 56—males 24, females 32.

Dengue fever has appeared in the Northern districts of N. S. Wales.

The Dairies Supervision Act (N.S.W.) has been extended to the police districts of Braidwood, Dowling, Moruya, Tenterfield, and the whole of the Port Macquarie police district.

The municipal district of Braidwood (N.S.W.) has been declared to be a Sanitary Area for the purposes of the Public Health Act.

VITAL STATISTICS.

SYDNEY.—The Registrar-General's report on the vital statistics of Sydney and suburbs for the month of January shows that the births recorded in Sydney and suburbs during that month numbered 1013, viz., 525 of males and 488 of females. The number of deaths was 516, viz., 266 of males and 250 of females. One hundred and twenty-five deaths, or 24·22 per cent. of the total, occurred in public institutions. According to the classification of the causes of death, local diseases, with a total of 243 deaths, occasioned 47·09 per cent. of the mortality of the month, and the most prominent in this class were—heart disease, 38; and enteritis, 72. Constitutional diseases came next with 105 deaths (20·35 per cent.), the principal being—cancer, 34; and phthisis, 48. Specific febrile or zymotic diseases, with 68 deaths, contributed 13·18 per cent., and included 10 cases of typhoid fever. Deaths from developmental diseases numbered 21, and from ill-defined causes the number was 45, 44 of which were of infants from atrophy, debility, inanition. There were 27 deaths from violence, including 19 accidents, 6 suicides, and 1 murder. Thirty-eight persons (16 males, 22 females) of the age of 70 years and upwards died during the month. There were 4 deaths of women from diseases or casualties incident to childbirth, representing 1 death of a mother to every 253 children registered. The number of deaths of children under 5 years of age was 224, or 43·41 per cent. of the total mortality, and of these 185 were under the age of 1 year. The number of births to every 1000 of the population was 2·47, and of deaths 1·26.

MELBOURNE.—During the month of December there were registered in Greater Melbourne 923 births (453 males, and 470 females), and 919 deaths. To every 1000 of the population the proportion of births was 24·09, and of deaths 23·98 per annum. Deaths among children under 5 years of age were 398, of whom 215 were under 1 year of age. The principal causes of death were—scarlet fever, 1; influenza, 3; diphtheria, 11; typhoid fever, 14; measles, 6; cancer, 37; phthisis, 62; apoplexy, 17; bronchitis, 23; pneumonia, 47; nephritis, 10; Bright's disease, 23.

ADELAIDE.—During the month of December, 1897, there were registered in the city of Adelaide 81 births and 102 deaths. Twenty-seven of the deaths were under 1 year of age. There were 6 from phthisis, 4 from enteric fever, 2 from scarlet fever, 4 from pneumonia, 13 from old age. The mean shade temperature at the Adelaide Observatory was 77·4° F. The mean height of the barometer was 29·888 inches. There were 763 births and 497 deaths in the colony of South Australia, exclusive of the Northern Territory.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the

month of January 114 births—51 males and 63 females—were registered in the registration districts of Hobart and Launceston. To every 1,000 of the population of the two districts the proportions of births registered were as follow:—For Hobart, 1·71; for Launceston, 1·88; all, 1·78. Deaths.—The deaths registered in January, in Hobart and Launceston, numbered 97—48 males and 49 females; 35 deaths, or 36·08 per cent. of the whole, took place in public institutions. To every 1,000 of the population of the respective divisions the proportions of deaths registered were as follow:—Hobart, 1·63; Launceston, 1·32; all, 1·51. The deaths under 5 years of age numbered 37, or 38·15 per cent., of which 32 were under 1 year of age.

NEW ZEALAND.—The proportion of deaths registered during January to every 1,000 of the population was 1·40 for Auckland and suburbs, 0·98 for Wellington with suburbs, 1·26 for Christchurch and suburbs, and 1·08 for Dunedin and suburbs. The total births in these four boroughs amounted to 395. The deaths were 214, to which males contributed 110, and females 104. Sixty-three of the deaths were of children under five years of age; 54 of these were under one year of age. There were 13 deaths from cancer, 19 from phthisis, 7 from pneumonia, 22 from influenza, 2 from diphtheria, 10 from enteritis.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

Launceston Hospital, Tas.—The Staff Question.—At the meeting of the Launceston Hospital Board of Management, held on the 17th ult., the special committee appointed to consider the petition of the medical men with reference to the appointment of an acting rather than a consulting honorary medical staff, brought up the following report:—"When the Board of Management was first formed, the system which is now sought to re-introduce was in existence, and in its working was found to be most unsatisfactory. The present system has been in operation for about sixteen years, and during the whole of that period the history of our hospital management has been marked by continuous improvement and progress, until now it has reached a condition of efficiency that has gained for it the reputation of being one of the best managed institutions of its kind in any part of Australasia. Your committee, after taking into consideration the whole of the circumstances of the institution, are of opinion that it would be inadvisable to make any suggestion involving a radical change in the existing management of the hospital." After a lengthy discussion the report was adopted unanimously.

A special meeting of the governors of the Beaconsfield Hospital was held on the 25th ult. A discussion followed as to what steps should be taken to cope with the outbreak of typhoid. It was unanimously resolved:—"That the chairman be authorised to procure extra nurses and any other assistance the matron requires." "That the secretary be instructed to make application to the Government for two large tents, not less than 20 ft. x 15 ft." "That the Government be requested to place £200 at the disposal of the Board to provide extra beds, nurses, &c."

MEDICAL NOTES.

Medical Magistrates:—Francis Hallis Woods, Esq., J.P., L.R.C.P., &c., has been appointed a member of the Licensing Court for the Licensing District of Uralla, N.S.W. Also John Baldwin Meredith, Esq.,

J.P., L.R.C.P., &c., to be member of the Licensing Court for the Licensing District of Raymond Terrace, N.S.W.

A. J. H. Saw, M.D., B.S. Cantab., has been appointed a Governor of the High School, Perth, *vice* Sir A. C. Onslow, resigned.

MILITARY AND DEFENCE APPOINTMENTS.

The Governor, with the advice of the Executive Council, has approved of the following appointments in the New South Wales military forces:—

Medical Staff Corps: Honorary Surgeon-Lieutenant Charles Augustus Edwards to be Surgeon-Lieutenant on the partially-paid establishment; Herbert Ernest Lee, B.A., Sydney, M.B., C.M., Edin., to be honorary Surgeon-Lieutenant; James Brown Crabbe, M.B., C.M., Edin., to be honorary Surgeon-Lieutenant; and George Lane Mullins, M.A., M.D., Univ. Dub., M.D., Univ. Sydney, to be honorary Surgeon-Lieutenant.

OBITUARY.

JOHN PARKER BRERETON, L.A.H. Dub., L. & L. Mid., R.C.P. & S. Edin. 1875, of Shoalhaven, N.S.W., died at Rotorua, N.Z., on February 11. Dr. Brereton, who was unmarried, lately went to New Zealand on a visit. He was a native of Ireland, and had been for 23 years in practice in Shoalhaven. He was 48 years of age at the time of his death.

ERNEST JAMES CHEETHAM, L.R.C.P. & S., L.M. Ed., L.F.P.S. Glasgow 1889, who has been practising at Scottsdale, Tas., for the past two years, was found dead in his bed on Sunday, January 7. At the inquest on the following day evidence was given by Drs. Ick and Hamilton, who had made a *post-mortem*, that death was due to alcoholic and narcotic poisoning, and largely the latter.

CHARLES MCKAY, M.D. St. And. 1843, L.R.C.S. Edin., 1843, President of the N.S.W. Medical Board, died at Stanmore, Sydney, on March 10. Dr. McKay came to N.S.W. over 40 years ago, and was for many years connected with the Sydney Hospital as Surgeon, and, later, Consulting Surgeon. Dr. McKay had retired from practice for some time. He was in his 77th year.

FREDERICK MARGETTS, M.B.C.S. Eng. 1836, L.S.A. Lond. 1837, formerly Hon. Surgeon to the Warwick (Q.) Hospital, &c., died on January 11 at an advanced age.

JOHN REES, M.R.C.S. Eng. & L.R.C.P. Lond. 1888, late of Georgetown (Q.), died in Brisbane Hospital on February 13.

EDWARD EMERSON ROSENBLUM, M.B. 1886, Ch.B. 1887, Melb., Medical Superintendent of the Hospital for the Insane, Ballarat, Vic., died on February 8. Deceased, who was 35 years of age, had been an officer of the Victorian Lunacy Department for over 10 years, and during that period had been stationed at the Ararat, Yarra Bend, and Kew Asylums. He leaves a widow and three children.

SAMUEL IRVINE WILLIAMS, L. & L. Mid., R.C.P. & S. Edin. 1892, L.F.P.S. Glas. 1892, died on March 7, at Fitzroy, Vic., from an overdose of atropine, administered in mistake for morphine. Dr. Williams was 32 years of age.

GEORGE JACOB YOUNG, M.B. C.M. Edin. 1882, died at sea in March. Dr. Young, who had been suffering from lead poisoning, left Horaham, Vic., where he had been in practice for fifteen years, for a trip to England. A cablegram from Cape Town, South Africa, announces his death on the voyage.

MEDICO-LEGAL.

A SINGULAR action was concluded in the Auckland (N.Z.) Supreme Court on Thursday, 3rd instant. Miss Baker, a young lady, sued Dr. Arthur C. Purchas for \$500 damages for personal injuries. The doctor was attending a patient in the hospital suffering from extensive burns, and was desirous of performing an operation of skin-grafting if he could find anyone willing to give their skin. The plaintiff and two others consented, she being under the impression that only a small piece of skin would be taken, and that she would suffer little inconvenience. Instead, however, a considerable quantity, 52 square inches, was taken from her arm and leg while under chloroform, and she had to remain in the hospital for eleven days. The defence was that the plaintiff voluntarily consented to give what skin was required. It transpired that the patient died. A verdict was given for defendant.

A man named Wm. Charleston, who described himself as a phrenologist and an authority on matters of health, was charged at the Police Court, Queenstown (Tas.), on 31st January, with a breach of the Medical Practitioners Act on January 23, inasmuch as he did make up and sell a prescription to a man named Hanly for ten and six (10s. 6d.). Evidence showed the prescription to contain liquorice and water. He was fined ten pounds (\$10), or three months' imprisonment.

BATTLE OF THE CLUBS.

ORANGE, N.S.W.

DR. A. J. DAVIES, late of Gosford, N.S.W., has been appointed a Medical Officer of the dissenting lodges at Orange, N.S.W.

CHANGE OF ADDRESS, &c.

Dr. G. O. F. ALSOP has succeeded to the practice of Dr. Naylor, of Hobart.

Dr. HARRIET T. BIFFIN has commenced practice at Elmsley House, Elizabeth-street, Hyde Park, Sydney.

Dr. E. HAROLD BINNEY, late Medical Superintendent of the Sydney Hospital, has commenced practice at 197 Elizabeth-street, Sydney.

Dr. L. BOOB, formerly Resident Surgeon at the Nelson Hospital, N.Z., has returned from his trip to England.

Dr. S. FINLAY, late of Balmain, Sydney, has taken over Dr. McMath's practice at Dungog, N.S.W.

Dr. J. MACDONALD GILL has removed from 197 Liverpool-street to 18 College-street, Sydney.

Dr. W. H. HARRIS, late of Sydney Hospital, has gone to England for a trip.

Dr. J. M. JACKSON has commenced practice at Muswellbrook, N.S.W.

Dr. ROBERT LAMB, late of The Dip Point Hospital, Ambrym, New Hebrides, has commenced practice at Molong, N.S.W.

Dr. J. I. MOORE, formerly of Springsure, has settled at Esk, Q.

Dr. D. A. ROBINSON, a recent arrival, has commenced practice at Deloraine, Tas., in conjunction with Dr. Morris.

Dr. STRATFORD SHELTON, late of the Sydney Hospital, has commenced practice at Armidale, N.S.W.

Dr. E. B. STONEY has removed from Pambula to Nowra, N.S.W.

Professor ANDERSON STUART has returned to Sydney from England.

Dr. E. C. TEMPLE-SMITH has commenced practice at Mount Morgan, Q., in conjunction with Dr. Mackenzie.

Dr. A. H. WATSON, late of Streaky Bay, S.A., has gone to Goongarie Hospital, W.A.

Dr. H. G. WAUGH has succeeded to Dr. W. H. O'Neill's practice at Narrandera, N.S.W.

Dr. ELLEN M. WOOD has commenced practice at Rimsley House, Elizabeth-street, Hyde Park, Sydney.

MEDICAL APPOINTMENTS.

Allan, E. B., M.D., to be Officer of Health for Daylesford, Vic., *vice* Dr. T. R. H. Willis, resigned.
 Armstrong, Wm. G., M.B., Ch.M. Syd., D.P.H. Camb., to be Medical Officer of Health for the combined Metropolitan districts, Sydney.
 Broué, A., L.R.C.S. Edin., to be a Public Vaccinator for the district of Shannon, N.Z.
 Cooley, P. G., M.B., Ch.M. Sydney, has been appointed Resident Medical Officer, Coast Hospital, Sydney.
 Cuthbert, J., L.R.C.S. Irel., &c., to be Health Officer of Victoria Park district, Perth, W.A.
 Dey, Robert, M.B., Ch.M., Sydney, has been appointed Resident Medical Officer at the Coast Hospital, Sydney.
 Dick, Robert, M.B., Ch.M. Syd., D.P.H. Camb., to be Medical Officer of Health for the combined Hunter River districts, Newcastle, N.S.W.
 Godfrey, H. P., M.B. Melb., F.R.C.S. Eng., to be Health Officer at Bardonia, W.A.
 Hart, J. W., M.B., Ch.M., Edin., to be Government Medical Officer and Vaccinator for district of Gunning, *vice* Dr. W. H. Tibbits, left the district.
 Hunt, S. J., L.R.C.P. Edin., M.R.C.S. Eng., to be Government Pathologist for Queensland.
 Lethbridge, R. W., M.B., &c., to be Acting Medical Superintendent of the Ballarat Lunatic Asylum, Vic.
 Luker, Donald, M.B., has been appointed Medical Officer to the Brewarrina Hospital for the ensuing 12 months, at a salary of £300.
 Maddox, W. G., M.R.C.S. Eng., &c., to be an Hon. Consulting Surgeon, Launceston Hospital, Tas.
 Mullen, W. L., M.D., &c., to be Acting Medical Superintendent of the Sunbury Lunatic Asylum, Vic.
 Parley, J. M. L., M.B., R.Ch. Melb., &c., to be an Hon. Consulting Surgeon, Launceston Hospital, Tas.
 Pike, C. J., M.R.C.S. Eng., &c., to be an Hon. Consulting Surgeon, Launceston Hospital, Tas.
 Rooks, Chas., M.R.C.S. Eng., &c., to be a member of the Emu Bay Board of Advice, Tas.
 Snelair, Eric, M.D., Ch.M. Glas., &c., to be Inspector-General of the insane of N.S.W., *vice* Dr. F. Norton Manning, resigned.
 Thompson, J. L., M.B., &c., to be Acting Medical Superintendent of the Ararat Lunatic Asylum, Vic.
 Wilson, Dr. Thos., to be Health Officer of Day Dawn, W.A.
 Williams, D. E., L.R.C.P. & S. Irel., to be Health Officer for Bunbury, W.A.

MEDICAL RESIGNATIONS.

The following medical resignations are announced:

Manning, Frederic Norton, M.R.C.S. Eng., M.D. St. And., as Inspector-General of Insane, N.S.W.
 Willis, T. R. H., M.B., Ch.B. Melb., as Officer of Health for Daylesford, Vic.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following gentlemen, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Affleck, Ada, M.B. Univ. Sydney 1898.
 Biffin, Harriett Eliza, M.B. Univ. Sydney 1898.
 Bohrmann, Gustav Hall, M.B. Univ. Sydney 1898.
 Bowker, Cedric Victor, M.B. Univ. Sydney 1898.
 Cooley, Percy Glover, M.B. Univ. Sydney 1898.
 Cope, Hubert Roger, M.B. Univ. Sydney 1898.
 Dey, Robert, M.B. Univ. Sydney 1898.
 Ellis, Laurence Edward, M.B. Univ. Sydney 1898.
 Hall, Edwin Cuthbert, M.B. Univ. Sydney 1898.
 Kater, Norman William, M.B. Univ. Sydney 1898.
 Lippcomb, Thomas Walter, M.B. Univ. Sydney 1898.

MacPherson, John, M.B. Univ. Sydney, 1898.
 O'Keefe, John James, M.B. Univ. Sydney 1898.
 Puelleine, Robert Henry, M.B. Univ. Sydney.
 Read, William Henry, M.B. Univ. Sydney 1898.
 Sheldon, Herbert, M.B. Univ. Sydney 1898.
 Stacy, Harold Skipton, M.B. Sydney 1898.
 Stevens, William Woodburn, M.B. Univ. Sydney 1898.
 Throsby, Herbert Zouch, M.B. Univ. Sydney 1898.
 Coker, Alfred Philip, Lic. Soc. Apoth. Lond 1895.
 Waugh, Henry George, M.B. Univ. Edin. 1896; Mast. Surg. Univ. Edin. 1896.
 Hill, Richard Percy, M.B. Univ. Edin. 1896; Mast. Surg. Univ. Edin. 1896.
 La Touche, Edmund Lindsay Digges, Lic. R. Coll. Surg. Irel. 1894.
 For Additional Registration:—
 Pain, Ernest Maynard, M.Ch. Univ. Sydney 1897.
 Wassell, Joseph, Leatham, M.Ch. Univ. Sydney 1897.

QUEENSLAND.

Zichy-Woinarski, Gustav Henry Stephen, M.B. Ch.B. 1883 Univ. Melb.
 Temple-Smith, Edwin Charles, Mem. R. Coll. Surg. Eng. 1897; Lic. R. Coll. Phys. Lond. 1897; M.B., Bac. Surg.; R. Univ. Ireland.
 Hill, Richard Percy, M.B., Mast. Surg., 1896, Univ. Edin.
 O'Keefe, John James, M.B. 1898 Univ. Sydney.
 Turkington, Humphrey, M.B., Bac. Surg. 1897 R. Univ. Irel.
 Republished:—
 Burgoyne, John Thomas, Lic. R. Coll. Surg. Irel. 1871 (Registered in Queensland 6th March, 1874).
 Additional Qualification Registered:—
 Robertson, J. O., M.D. Univ. Glasgow 1895.

SOUTH AUSTRALIA.

Johnson, Edward Angus, M.B., B.S. Melb. 1897; Adel. 1897.
 Wilson, Gerald Barry, L.R.C.P. & S. Edin. 1882.
 Randell, Allan Elliott, M.B., B.S. Melb. 1897, Ade. 1897.
 Shields, Oswald Olive Grueame, M.B., B.S. Melb. 1897.
 Blaxland, Walter, M.R.C.S. Eng. 1883, L.R.C.P. London 1884, F.R.C.S. Eng. 1886.
 Good, Joseph Ernest, M.B., C.M. Edin. 1894.
 Jermyn, Walter Herbert, M.B. Melb. 1889, B.S. Melb. 1890.

TASMANIA.

McArthur, Arthur Norman, M.R.C.S. Eng. 1894; L.R.O.P. Lond. 1895.
 Robinson, Douglas Albert, L.R.C.P. Edin. 1896; L.R.C.S. Edin. 1896; L.F.P.S. Glas. 1896.
 Stone, Emma Constance, L.S.A. Lond. 1889; M.D. Ch.M. Univ. of Trinity College, Toronto, 1888.

VICTORIA.

McGee, John Henry, M.B. & Ch.B. 1893; M.D. 1896; R. Univ. Irel. D.P.H. Camb. 1896.
 Bridges, Ashley Colston, L.S.A. Lond. 1878; M.R.C.S. Eng. 1880.
 Hayes, George Constable, M. 1892; F. 1897; R.C.S. Eng.; L.R.C.P. Lond. 1892.

WESTERN AUSTRALIA.

Godfrey, Horace Percy, M.B. Melb., 1890; B.S. Melb. 1891; F.R.C.S. Eng. 1890.

NEW ZEALAND.

The following applicants for registration have deposited their evidence of qualifications in the office of the Registrar-General.

Andrew, Philip Oswald, M.R.C.S. Eng.; L.R.C.P. Lond.
 Baldwin, Gerard Robert, M. 1892, F.R.C.S. Eng. 1894, L.R.C.P. Lond. 1893.

REVIEWS.

A HANDBOOK OF DISEASES OF THE NOSE AND PHARYNX. By James B. Ball, M.D. (Lond.), Physician to, and in charge of, the Department for Diseases of the Throat and Nose, West London Hospital. Third edition. London: Baillière, Tindall and Cox. Sydney: L. Bruck, 1897.

This, the third edition of a well-known text-book of diseases of the throat and nose, is to be recommended to the general practitioner who strives to keep himself abreast of the times.

The work is prefaced with an account of the anatomy and physiology of the region treated of in subsequent chapters. The preliminary chapters on General Diagnosis and Methods of Treatment are well written and to the point.

The volume contains all that an ordinary practitioner needs to know, and even the specialist may read it with advantage. Dr. Ball's style is good, his descriptions excellent, and the illustrations (some 54 in number) are very appropriate. Theoretical discussions and descriptions of illustrative cases and some rare diseases, *e.g.*, Rhinoscleroma, are omitted, as they would add to the size of the book, without in any way interfering with its usefulness.

A MANUAL OF PRACTICAL MEDICAL ELECTRICITY. By Dawson Turner, B.A., M.D., F.R.C.P. Edin., M.R.C.P. Lond.; Lecturer on Medical Physics and Electro-Therapeutics, Surgeons' Hall, Edinburgh; Assistant Electrician to the Royal Infirmary, Edinburgh. Second edition. London: Baillière, Tindall and Cox, 1897. Sydney: L. Bruck. Price, 7s. 6d.

This manual is intended to serve as an introduction to the study of electricity in its applications to medicine. It is expressly meant for those practitioners and students to whom an elementary work, kept as far as possible free from mathematical and physical definitions and formulae, is a desideratum. An introductory chapter explains the various forms of electricity—Static, Galvanic, and Faradic, and their characters.

Part I. treats of Electro-physics, and contains chapters on Static Electricity, Magnetism, Galvanism, Forms of Cells, Electro-motive Force, Strength of Currents, &c.

The Second Part is devoted to Electro-physiology; Part III., to Electro-diagnosis; Part IV., to Electro-surgery. The Fifth Part, dealing with Electro-therapeutics, is extremely practical and useful. In this, the second edition, an up-to-date chapter on the Röntgen Rays completes the work.

Dr. Turner has written a work which should be in the hands of every practitioner in Australia. It is written in language divested of technical terms as far as possible. The illustrations are clear, and add to the value of the text.

We have much pleasure in recommending this book to all those who are interested in the study of nervous diseases.

HAND ATLAS SERIES, VOL. IV.: ATLAS AND ESSENTIALS OF GYNÆCOLOGY. By Dr. Oscar Schaeffer, Privatdocent in Obstetrics and Gynecology at the University of Heidelberg. With 173 Coloured Plate Illustrations, and 54 Woodcuts. London: Baillière, Tindall and Cox. Sydney: L. Bruck. Price, 15s.

In this volume an effort is made to supply the student and medical practitioner with the material, which personal clinical observation should supply, in the shape of coloured plates depicting most of the pathological conditions met with in the female generative organs, and it must be said that the effort has succeeded well, as many of the plates present a lifelike appearance of the conditions met with in general practice. In addition to the Anatomical Plates, numerous Schematic Drawings are given showing the various degrees of ante- and retro-versions and flexions, and the means of performing bi-manual examination. To the country practitioner who has to treat all cases that come under his notice, it is of very great advantage to

have such a work as this, showing so vividly the changes that take place—say in the os uteri in cases of laceration, erosion, new growths, &c., &c., and practically places within his reach the advantages of a large clinique.

The second part of the volume deals in a necessarily short, but lucid, manner with Malformations, Changes in Shape and Position, Inflammations, Injuries, and Neoplasms.

Altogether the work is well worth a place in every library.

BIRTHS MARRIAGES AND DEATHS.

BIRTHS.

- BROWN.**—On January 29, at White Feather Hospital, Kanowna, W.A., the wife of G. Harward Brown, M.B., B.S., of a son.
CRAIG.—On February 5, at Waratah, 1 King Street, Newtown, Sydney, the wife of Dr. Robert Gordon Craig, of a daughter.
McINERNY.—On February 15, at Nicholson Street, North Carlton, Vic., the wife of John McInerny, M.D., of a daughter.
MULLINS.—On February 24, at 293 Elizabeth Street, Hyde Park, Sydney, the wife of George Lane Mullins, M.D., of a son.
PEACOCK.—On January 24, at Blackburn House, 102 Victoria Street, North Melbourne, the wife of Robert Knox Peacock, M.B., O.M., M.R.C.S., of a son.
RYGATE.—On February 1, at Grenfell, N.S.W., the wife of Dr. R. E. Rygate, of a daughter.
SALMON.—On February 10, at Ballarat East, Vic., the wife of H. R. Salmon, M.B. & Ch.B., of a daughter.

MARRIAGES.

- BINNEY—HASLER.**—On February 8, at St. Andrew's Church, Brighton, Victoria, by Rev. Cannon Flinn, Edward Harold Binney, M.B., Ch.M., of Sydney, second son of the late Edward Nixon Binney, of London, to Muriel Mary Sutherland, second daughter of the late George Massey Hasler, of Melbourne.
BLACKWOOD—ADAMS.—On February 16, 1898, at St. John's, Darlinghurst, Sydney, Frederick Martindale, fourth son of John Blackwood, Esq., Sunderland, England, to Elizabeth Jessie, widow of the late J. H. Adams, of Cooma.
D'OMBRAIN—GIBBINGS.—On December 29, 1897, at St. Saviour's Cathedral, Southwark, England, Ernest Arthur D'Ombraim, M.B., B.S., fifth son of Ed. D'Ombraim, Hawthorn, Victoria, to Adeline Maude, youngest daughter of H. Gibbings, of North Tawnton, Devon, England.

DEATHS.

- BRERETON.**—On February 11, at Rotorua, New Zealand, Dr. John Parker Brereton, of Nowra, N.S.W., aged 46 years.
CAMERON.—On February 6, at Olintra, East St. Kilda, Vic., Ethel Elfreda Austin, beloved wife of Donald Cameron, M.B., Ch.M., and eldest daughter of William Henry Embling, aged 26 years.
HOOPER.—At Mornington, Vic., Mary, wife of late Dr. F. L. Hooper, Aged 74.
LANE.—On March 3, at Erindale, Inverell, N.S.W., Jane, widow of the late Thomas Bagot Lane, M.B., F.R.C.S.I., of Tullow, Co. Carlow, Ireland, aged 77 years.
M'KAY.—On March 10, at his son's residence, 11 Cambridge-street, Stanmore, Sydney, Charles M'Kay, M.D., in his 77th year.
MURPHY.—On February 12, at Nagambie, Isabel Mary Eileen, only daughter of Dr. W. P. Murphy, aged 12 months.
ROSENBLUM.—On February 8, Edward Emerson Rosenblum, M.B., Ch.B., aged 35, Medical Superintendent Hospital for the Insane, Ballarat.
WEST.—On January 7, at her residence, Kilmanagh, County Kilkenny, Ireland, Georgiana Grove, widow of the late George White West, B.L., of Ardenode, County Kildare, and mother of Dr. William A. West, Glebe, Sydney, in her 74th year.

Mr. Bruck desires us to state that his well-known Diet Lists may also be obtained separately in pads of 25 for 1s., postage paid.

MESSRS. BURROUGHS, WELLCOME & Co. have been informed by the Executive Commissioner for the Brussels International Exhibition, that the International Jury on Pharmacy and Medicine have awarded them the Grand Prix and two Gold Medals for the high standard and scientific excellence of their fine Chemical and Pharmaceutical Products.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS.

BY CHARLES P. B. CLUBBE, L.R.C.P. LOND,
M.R.C.S. ENG., HON. SURGEON TO THE
PRINCE ALFRED HOSPITAL, HON. SURGEON
TO THE SYDNEY HOSPITAL FOR SICK
CHILDREN, SYDNEY.

DELIVERED AT THE ANNUAL MEETING OF THE
NEW SOUTH WALES BRANCH OF THE BRITISH
MEDICAL ASSOCIATION, 25TH MARCH, 1898.

To-night in this Branch we close the old year and open a new one. The report of the Council which you have heard read shows that much good work has been done during the last twelve months. Thirty-seven new members have joined, one has died, twelve have resigned, and 371 remain on the list. Our Branch, with the exception of Montreal, is still by far the largest colonial Branch, and of all the seventy branches of the great British Medical Association there are only six that have more members than we have in New South Wales.

I am glad to be able to say that our financial position is healthy, and especially the *Gazette* fund. This being so, the Council felt it was only right that the Editor, Dr. Knaggs, also the Manager, Dr. Crago, should in some slight way be remunerated for the enormous amount of labour they have to expend each month before each *Gazette* appears. They therefore granted each of them an honorarium. I feel sure that all the members will approve of the action of the retiring Council.

By the death of Mr. Ernest Hart the British Medical Association sustained a great loss, as it is in a great measure to his ability, energy and untiring zeal the great Association now holds the position it does. To quote the words of Dr. Saundby, "For more than thirty years he has not only been the able and accomplished Editor of the *British Medical Journal*, but he has been the originator of nearly every development by which our Association has expanded itself and become more useful to the medical profession in its broader and more scientific, as well as in its corporate relations. He has died no longer young, having lived a life full of purpose, having accomplished many things."

Early this year, after thirty years' work in the service of the country, Dr. Norton Manning, Inspector-General of the Insane, resigned his great position. The loss to the country

can hardly be estimated. The condition of the insane in this colony before Dr. Manning took command was deplorable. Everything was in confusion. Lunatics were not properly looked after. They were badly housed and badly fed. Now they are well cared for, and live in palace-like asylums surrounded by beautiful gardens. The Lunacy Act now in force in this colony is also in a great measure the result of Dr. Manning's labour; and what does the country do for such a man, for a man who has spent the best years of his life in its service? It harasses and annoys him with its Public Service Board. He who practically originated the whole Lunacy Department, who made order where there was chaos, has his recommendations disregarded or set on one side. Men who knew nothing of the working of this great department set their opinion against one who had made it a life's study.

It is well known amongst the profession, but probably not by the public, that medical men holding important public appointments are very much underpaid. Dr. Manning's salary is an instance. After thirty years' service, and holding the important position he did, he was paid £970 per annum. A man in his position and of his standing was surely worth as much to the country as a judge. The public take us at our own valuation. It is for us as a body to insist on more adequate remuneration for those medical men in high positions in the public service.

HOSPITAL FOR CONSUMPTIVES.

Early last year a great effort was made to induce the public to find funds to build a hospital for the treatment of persons suffering from consumption. It was to be called the Queen Victoria Home for Consumptives. Public meetings were held, and a large and influential committee was formed. All sorts of arguments were used to get people to subscribe. One speaker, at a meeting in the Town Hall, tried to work upon the fears, as well as the charitable feelings, of his audience. But in spite of all efforts the movement has fallen flat. The total amount collected up to the present time is about £13,000, and £3,000 of this has been obtained from the sale of Jubilee stamps; so that the public have so far only subscribed £10,000. If the movement is to be in any sense a success, five or six times this amount must be forthcoming. Now it behoves us to enquire what has led to the partial failure of this very laudable and

necessary scheme for procuring hospital accommodation for those unfortunate people suffering from pulmonary tuberculosis. It is, I think, partly due to the differences of opinion that exist among medical men as to the carrying-out of this grand work. A meeting of the profession was held in this room on 11th June, 1897, at which certain propositions were made and unanimously agreed to. Then at a meeting of this Branch on 25th June other propositions were made; the discussion was adjourned, and they were subsequently agreed to at a meeting held on the 30th July. The differences between the two schemes were not, to my mind, very important, but they are differences; and the public were only too glad of an excuse not to subscribe. It was said at once that the medical profession had disagreed as to the best method of dealing with the matter, and that until the doctors had done wrangling among themselves it would be just as well not to give any more.

Quite recently we were told that unless subscriptions were forthcoming to the amount of £100 per month, the Thirlmere Home, which has done so much good since it was inaugurated, would have to be closed. Some stirring articles and letters were written on the subject in the daily papers, and it is now almost certain that the colony will be saved the eternal disgrace of being unable or unwilling to support such a much-needed charity, and one that for seventeen years was maintained by one man alone.

MEDICAL BILL AND QUACKS.

The year did not go by without one more attempt to induce the Legislature to pass a Medical Bill. At a meeting of this Branch, held July 30th, the following resolution was carried:—"The N.S.W. Branch of the British Medical Association, having considered the provisions of the Medical Bill now before the Legislative Council, desires to express its entire approval of the same, and hopes that a Bill so urgently necessary in the interests of the public welfare will soon become law."

Dr. Bowker's Bill, however, shared the fate of all its predecessors, and was shelved.

The medical profession have long ceased to be surprised at the action or inaction of their Parliamentary representatives in this matter. I think we most of us feel they deserve more pity than anger.

It seems almost incredible that any body of men, imbued with a sense of responsibility, could quietly adopt this policy of *laissez faire* after hearing and reading the evidence given before the Royal Commission, moved for and

presided over by the Honorable J. Mildred Creed just ten years ago.

The revelations that were then made caused a great sensation at the time, and most people thought immediate action on the part of the Government of the day would be the result. Of course we shall get a Medical Bill some day, but when that day will come no man can say. It may even be necessary to appoint another Royal Commission.

There are two kinds of quacks in Sydney—those that have some medical degree or diploma, and those that have had no medical education at all. The two classes are equally loathsome, equally rapacious, and equally dangerous to the poor, silly, deluded fools who get into their clutches, and both kinds should be dealt with and exterminated like any other kind of vermin.

It is almost impossible to exaggerate the amount of mischief these lying reptiles do to hundreds of their innocent victims.

I do not mean to include in this strong condemnation a few men (I believe there are seven or eight in this colony) who, although they have no medical degree or diploma, yet have had some regular medical training, and have perhaps only failed in their final, or have been obliged from lack of funds to leave the hospital before becoming fully qualified. The men to whom I refer, although not qualified, cannot be called quacks, because they do not quack. They practise in a quiet unostentatious way, and do their best to uphold the honour of the profession they have just missed becoming members of. Some provision might well be made in the next Medical Bill for getting these men registered if they can show that they have had some regular medical training, that they have been practising in a reputable way for a certain number of years, and that they have a fair knowledge of their work.

Although we have failed many times, we must not despair. A time will come when public opinion will be roused, and the Government of the day will be obliged to legislate on a matter that so nearly concerns the welfare of the masses.

Any Medical Bill that is passed must deal with the qualified, as well as the unqualified quack. It must provide for a strong medical council. This medical council should have power to remove from the register the names of all those men who have forfeited the degree or diploma from the bodies who originally granted them, even if this has not been done (and some bodies have no power to cancel a degree). The council should have power to remove from the

register the name of any man who is practising in a notoriously irregular manner. I mean those men who are prostituting their noble calling by advertising their wares after the manner of charlatans and humbugs. For these men do not try to cure disease or alleviate suffering; they only trade on the credulity and fears of their victims, and are ever extorting money.

With a Medical Bill that makes it a penal offence to pretend to be legally qualified when unqualified, which gives power to a council to remove from the register a lot of disreputable, but qualified, scoundrels, which make it necessary for all death certificates to be signed by men still on the register, then I say quackery and humbug would soon be brought within reasonable bounds in New South Wales.

The procuring of abortion is a penal offence in this, as in most other civilised countries, and yet the daily and weekly papers teem with advertisements that most openly and unblushingly invite people to send for remedies which are "certain to remove obstructions." Others advertise that they "remove obstructions without medicine."

It is well known that there are any number of abortionists in Sydney. Many of them must be well known to the police. Why is nothing done to prevent this fearful traffic?

If the procuring of abortion is illegal, then surely the insertion of advertisements in the public papers directly tempting people to break the law is illegal. Why do not the police proceed against the people advertising in this open way, and the papers who insert these advertisements, who, I maintain, if not actually criminal, are, at all events, conniving at a felony?

PUBLIC HEALTH ACT.

In November, 1896, an Act to Promote Public Health was passed by the Parliament of this colony. The third part of this Act, and the part which we as medical men are more particularly interested in, deals with the notification and prevention of infectious diseases, and came into force on the first day of this year.

This ought to be most useful and beneficial legislation, but in its present form it can never be of much service in preventing infectious disease.

The clause in the present Act which will probably do most good, and work best, is No. 28, which deals with infection in schools.

Any Health Act of this sort, if it is to be of any real practical use, must provide for the removal and isolation of persons suffering from infectious diseases, where such isolation cannot effectually be carried out at home. This portion of the Act was probably drafted by

those in authority in order to educate the public in the matter, and indicate to them and make them gradually see the necessity for the erection and efficient maintenance of fever hospitals.

The carrying-out of the provisions of this Act lies to a great extent with the local authorities in the various municipalities. I am afraid that in very many municipalities the local authorities are at present quite unfit to undertake the new duties that are now thrust upon them. But now certainly the aldermen of each municipality will always know how many cases of infectious disease they have in their boundaries, and, in the event of these diseases spreading to any great extent, or causing a high death rate, they may see how impossible it is to stamp out, or even keep in check, these infectious diseases unless the cases can be isolated. When the public grasp this fact, I think one great object of this part of the Act will have been achieved.

Clause 27, as it now stands, is quite unworkable if it applies to hotels, coffee palaces, and boarding houses. It reads thus:—

"Any person letting for hire or showing for the purpose of letting for hire any house or part of a house in which or in part of which within his knowledge there has been during the previous six weeks a person suffering from an infectious disease (whether the said house or part of house has or has not been disinfected) who fails to state that fact to the person negotiating for the hire of the house or part of a house for the above purpose shall be liable to a penalty not exceeding £20."

I know for a fact that the law as laid down in this clause is evaded. Managers have told me that it would be better for them to pay the fine several times over rather than comply with the law. They say if they were compelled to comply that they would have to shut up because they would have empty houses.

The manner in which some of the suburban municipalities are now carrying out the Act is somewhat amusing. When the local authority, i.e., the Council Clerk, gets a notice from a legally qualified medical practitioner reporting a case, say, of scarlet fever in the municipality, the Council Clerk sends for the Inspector of Nuisances, who is told to go to the house where the disease exists. This man sees the person in authority, (probably a poor ignorant woman with a lot of children); this woman is informed that she must disinfect at once. The unfortunate woman has not the faintest idea what she has to do or how she is to do it, and probably, after worrying about it all day, ends

by sprinkling about some chloride of lime or carbolic powder on the floor, or putting a saucer of Condy's fluid under the bed. Or, perhaps, instead of this, she burns a little sulphur on a shovel, with the doors and windows wide open. This absurd sort of disinfection may go on for several days, but no thorough disinfection of the house or patient's clothes takes place when desquamation is at an end.

Perhaps the newly-appointed Health Officers will see into this matter; but they will have more than they can do if they are personally to superintend each disinfection. If this provision of the Act is not to be a farce, the municipalities must appoint properly qualified Sanitary Inspectors, and also pay men to attend to the work of disinfection in poor localities. The smaller municipalities might be grouped together for the purpose of carrying out the Act, and thus save much expense.

Clause 30, Section A, reads thus: "Any person who while suffering from any infectious disease exposes himself without proper precaution against spreading the said disease in any street or public place," etc., etc. How can this be carried out in case of children in poor neighbourhoods? Take the case of a child suffering from a mild attack of scarlet fever. The child feels quite well and able to run about after the first week, but of course is highly infectious. Is it likely, is it probable or possible, in this hot climate, that the child will be kept confined to one stuffy room for the five or six weeks while he is desquamating? You all know that it is well nigh impossible. The child (and its brothers and sisters) will not be allowed to attend school if the case has been reported, but it will spend most of the day running about the streets and lanes of the neighbourhood, playing with its mates, and thus exposing itself without proper precaution in a public place, so contravening the Act.

We are told that the Act will not be strictly enforced at once, and that the people must be made to get gradually accustomed to it. This seems to me to be a mistake, because in this way we are getting the people gradually accustomed to breaking the law.

HOSPITAL ABUSE.

This country, like many others, suffers from, and has suffered from for many years, what is called hospital abuse. By this we may understand a misapplication of charity. Charitable institutions, that were originally founded for the relief of the sick poor, are now resorted to by all sorts and conditions of men. People perfectly well able to pay for medical advice

on moderate terms now flock to these hospitals and receive the charity dispensed there without the slightest qualms of conscience, without feeling that they are doing anybody any harm. They go with money in their hands, and they claim attention to their ailments as a right, quite forgetting that the very fact of their being able and willing to pay should at once and of itself debar them from receiving charity. The hon. medical staffs of the various hospitals are well aware of these abuses, because sometimes the most glaring instances of this misdirected charity comes under their notice; but so far they have been powerless to prevent or even to mitigate the evil. The great body of general practitioners are also well aware of this evil, for they know that many of their patients go away and get attended to at a hospital, and thus cheat them of their dues. The President-Elect I know has felt very strongly on this matter for many years, and I hope and trust that during his term of office a strong and determined effort will be made by the new Council and the members of this Branch to do something to remedy this abuse. If every case that comes under the notice of any medical man, whether he be connected with a hospital or not (and the private practitioners, especially those being in the country, are the ones that will be able to give the most useful information), were to be noted and this sent to the Council, in a short time we should have an overwhelming mass of information on the subject; and, with the information at hand, we should be able to compel the directors of the various hospitals to take very decided action to stay the evil. The people that abuse hospitals may be divided into five classes:—

First, those that are well off and go into hospital with the full determination of cheating the doctor. When these people are asked the ordinary questions as to their means, they probably say that they are not earning a pound a week. This may be actually true, but at the same time they may have several thousand pounds put by.

Second, the people that go to hospital because they do not consider they are recipients of charity at all. They would be quite indignant if you called them paupers. They always pay their way. They consider they pay for what they get. They do not consider for one moment they are cheating the doctors, because they fancy we are all paid for the services we render.

Third, the people who do not want to go to the hospital at all, would much rather be at home, but they are sent in by their medical

attendant The medical man has, perhaps, been attending for a few days, and then finds out or thinks that an operation is necessary. Perhaps he does not feel equal to performing the operation. This fact he is anxious that the patient should not know. So he saves his *amour propre* by telling the patient that the nature of the case is such that it cannot be properly attended to at home and demands hospital treatment, quite oblivious of the fact that there are any amount of private hospitals where any surgical emergency can be dealt with. There are, I know, very many cases that must go into a public hospital when an operation becomes necessary, simply because the people have limited means, and, although able to pay for ordinary medical attendance, are quite unable to meet the additional expense entailed by having an operation performed at home or in a private hospital. Still, apart from these cases, there are many others every year sent by their medical attendant to the public hospital who are really receiving charity, however much they pay, and where they ought never to have been sent, as they are in a position to meet any reasonable fee for attendance elsewhere. That a certain number of medical men err in this direction there can be no doubt, and hospital abuse is fostered by the very men whose interests are diametrically opposed to it and who ought to do all in their power to stop it.

Fourth, well-to-do people who meet with accidents in the streets or elsewhere, and who are taken by the Civil Ambulance Brigade straight off to the nearest public hospital. Many of these cases should not go to a public hospital at all. If they cannot be taken home, they could easily be taken to one of the numerous private hospitals, and their own medical man could be sent for. These cases, even if it is necessary to take them to a public hospital at once for immediate treatment, should not be kept in the institution a day after they are fit to be removed either to a private hospital or their own homes. Many such cases are treated in our public hospitals every year. The people feel no shame, because they say they were taken there and that they are paying for the treatment they receive.

Fifth, careful people with limited incomes, not by any means paupers—persons who would willingly pay a small fee for advice but are quite unable to afford the usual fee charged by the general practitioner.

How are we to alter this state of affairs? It is a difficult question, and one that has been discussed by hospital boards and medical men

all over the world for a long time. I agree with those who would put a stop at once to all payments both for indoor and outdoor patients. Let people seeking advice and treatment at the public hospital understand once and for all that when they go to the hospital they are receiving charity. They may not be paupers, but they ought to be indigent persons unable to pay for medical or surgical advice. If they can and want to pay one pound or two pounds per week the hospital is no place for them. If all payments were done away with, nine-tenths of the hospital abuse would cease at once. How the hospitals are to be carried on is another matter. If the charitable public do not subscribe largely enough when they know that their charity will not be abused, then some of the wards must be closed.

MEDICAL FEES.

While we are all grumbling at hospital abuse and lodge abuse—i.e., at well-to-do people making convenience of the various combinations that distribute cheap medical aid—we must not forget that the medical profession in this colony are in a great measure responsible for the abuse. The fees of nearly all medical men in this colony are so high, that the working-classes, the small shopkeepers, the bulk of married men employed in shops, offices, and banks, simply cannot afford to pay them.

In the last issue of *The Wealth and Progress of New South Wales*, Mr. Coghlan tells us that we have 56,000 employers and 300,000 wage-earners. The total income of the wage-earners is £23,636,000, which gives an average of a little more than £76 per male and £34 per female wage-earner during the twelve months. On inquiry I find that there are now 557,000 breadwinners in the colony, and only 50,000 of these are people with incomes of £240 and upwards, so that only about nine per cent. of the breadwinners of this colony earn this amount. Let us take the case of any married man with three or four children, earning, say, £150 a year. Now these people, and people earning half as much (as Mr. Coghlan's figures show), form the great bulk of the population. How can such a man possibly afford to call in a doctor or go and see a doctor if he, his wife, or any of his children are sick, when he knows that it will cost him 13s.—that is, 10s. 6d. for the doctor, and 2s. 6d. for the chemist if medicine is required? For the man earning £70 a year it is nearly half his week's wages.

The man earning £150 can doubtless afford to pay this amount once or twice. If he is a careful, honest, prudent man, he will not care to incur a liability which he knows he will be

unable to meet; he therefore has probably joined some medical aid society, and sends for the lodge doctor. Supposing he has for some reason or other been unable to join any friendly society; when sickness overtakes him or his family, he tells the doctor who may be called in that if the case is serious or likely to necessitate more than a very few attendances it must be sent to the hospital. He knows well that a doctor's bill of any size would absolutely cripple him if he attempted to meet it. Probably the man only just manages to live as it is, and he does not care to incur a debt which he knows it will be very difficult, if not impossible, for him to pay.

The imprudent, careless, and perhaps dishonest man sends for the doctor without hesitation and tells him to come often; but then he takes no thought for the morrow, and perhaps he never intends to pay. It comes to this. The honest, prudent man with small means, if he is not already in a lodge, puts off sending for a doctor till the last minute. If the child is sick it is often taken to the local chemist. The baby has a cough caused perhaps by bronchitis; the chemist's apprentice very likely prescribes paregoric, which certainly stops the cough, but may also stop the child, and the baby dies, a doctor being called in just at the end to give a certificate and save trouble. If the case is considered from the first of a serious nature, it is taken to the hospital.

Can we blame these people? How often should we go to a doctor ourselves if each visit cost us half our week's earnings? The sooner the doctors recognise that their present rate of fees are quite prohibitory to the great majority of the population the better for them. The obvious remedy for this state of things is that fees must be lowered by general practitioners for the working-classes and men with limited means. No man need lower his fees unless he sees fit, and specialists, hospital physicians, and surgeons can always, without injustice to anyone, command the usual fee, as they do in all large towns in the world. But I am sure that the rank and file of the profession, and especially men just commencing practice, will have to take a great deal less than they demand now. Some men strongly object to any lowering of fees; they will accuse those who give cheap advice and pay cheap visits of undercutting and underselling, and the men who begin this system must expect to get called hard names at first. At the beginning a certain section of the public, very likely the very people they are trying to befriend, will look upon them with suspicion.

The facts are these: We know that the great bulk of the people cannot afford to pay for medical attendance at the present rate. They therefore either employ lodge doctors, go to the hospital, or send for doctors and don't pay them. We also know that the number of people living here now who are able to enjoy the luxury of employing a medical man at the present rate of fees is limited; there are not nearly enough, in fact, to keep the present number of medical men alive.

No one who considers the matter can have any doubt as to what will happen. Whether you like it or not it is certain to come, and I say the sooner the better; for in this way a large number of people who are now attended for nothing at the hospitals and for next to nothing by the lodge doctors will pay moderate fees to doctors all over the colony.

Before I conclude, I must thank you for the honour you conferred upon me by placing me in this chair. Any man may well be proud of occupying the position of President of this large and important Branch of the British Medical Association. The position entails its responsibilities, but the duties are not onerous; the work chiefly falls on the shoulders of the Hon. Secretary and the Assistant Secretary. To Dr. Rennie and Mr. Green, not only my thanks, but the thanks of the whole Branch, are due for the able way in which they have carried out their duties during the year that has gone.

Gentlemen, for the annual address the President has always a very wide range of subjects from which he may select. I have chosen to bring before you this evening matters concerning our relation to the general public, matters that are of the very highest importance to us all in our professional life. Some things I have said may not gain the approval of you all. Sir William Gull once said, "That there is a truth in all things is certain, and yet nothing can be more certain, also, than that different minds, as it would seem equally well-informed, do form most opposite opinions on the same facts." Though you may not all agree with me, I hope you will believe that I have the best interests of our profession at heart.

ERRATA.—In Dr. Jefferis Turner's paper in March issue of this *Gazette*—line 33, page 91—the word "halenic" was inadvertently substituted for the word "hæmic."

KANGAROO TENDONS, superior quality, prepared, both dry and in bottles, may be obtained from L. Bruck, Sydney.

REMOVAL OF LARGE FATTY TUMOUR FROM THE LARGE INTESTINE OF A CHILD—RECOVERY.

BY H. RUSSELL NOLAN, M.B., HONORARY
SURGEON TO THE TOOWOOMBA HOSPITAL, Q.

DORA H., of Murphy's Creek, near Toowoomba, was brought to me on account of a large swelling in the abdomen.

The mother stated the stomach had always seemed somewhat large, but it was lately getting more swollen.

She was 2½ years old, and looked healthy and fat, but there was some sign of the muscles of the legs beginning to waste.

The abdominal swelling gave me all the signs of a hydatid of the liver, even to what I took to be a faint hydatid thrill.

Dr. McDonnell agreed with me in the diagnosis.

The mother, after this, saw Dr. Robertson, of Ipswich, and he gave another diagnosis, but on hearing that Dr. McDonnell and I had already seen her, and given an opinion, he very kindly advised the mother to take the child back to Toowoomba, and place it under our care.

Assisted by Drs. McDonnell and Freshney, I opened the abdomen, to find, to my surprise, that the tumour was solid.

Incising, I found it composed of fat. The

The tumour was dissected off the decending colon, to which it was attached for six inches by peritoneum, and removed. The bleeding was controlled without much difficulty.

No drainage was used, and the child made an uninterrupted recovery, being kept in a Hamilton splint for three weeks.

A month after the operation she went home, looking in splendid health, being rosy and fat. Four weeks after going home, I regret to say she was kicked by a horse one evening as she was running across the farm yard, and died from shock in a few minutes.

Coates, in his "Pathology," says, "Fatty tumours of the large intestine (the Appendices Epiploicæ) are pendulous from the first."

This certainly was not pedunculated, being sessile for six inches to the gut.

I can find no record of any tumour of this nature in anyone, young or old, of this enormous size; its weight being 5 lbs.

Winckel says that Rokitansky observed a lipoma the size of a walnut, on the lower border of the tube, in a woman of 47 years, and Winckel himself says that lipomata (of the tubes) have no practical significance because of their small size.

Coates figures a lipoma of the size of a hazel nut in the wall of the stomach.

These are all the references to lipomata in the peritoneal cavity that I have, and I should



abdominal incision had to be extended up and down till it was eight inches long; but the tumour could not be delivered then till another one was made at right angles to the first.

feel much obliged if some pathologist would inform me if there is any mention of a lipoma in this region at all approaching the size of the one now reported.

A CASE OF REMOVAL OF THE LEFT HALF OF THE TONGUE FOR EPITHELIOMA, AFTER PRELIMINARY LIGATURE OF THE LINGUAL ARTERY.

BY T. G. DAVY, M.A., M.D. OXON.,
COOLGARDIE, W.A.

R. R., AGED 62, brought to me for consultation by Dr. Brownless. On the left border of the tongue, at the junction of the middle and posterior thirds, a characteristic epithelioma was found. There was a six months' history of severe pain, and two or three slight hæmorrhages. The patient is a butcher, engaged in a fairly large way of business at Kurnalpi and Kalgoorlie, and fears lest removal of the whole tongue might prevent his continuance in the business. It was therefore decided to attempt the removal of one half the tongue only.

Accordingly, on February 8th, at 3 p.m., assisted by Drs. Leschen, Brownless, and Friedman, I tied the left lingual artery. By making a large incision, and aided by willing and skilful assistants, I succeeded in exposing the hyoglossus muscle and defining the hypoglossal nerve and ranine vein. But the usual difficulty was experienced in finding the artery, and only by tracing out the origin from the external carotid was it at last found at the posterior margin of the hyoglossus, and secured. Even then it seemed doubtful whether the strip of fascia-like tissue could be an artery, and the doubt expressed by Mr. Jacobson and other surgeons as to the advisability of attempting to ligature the vessel seemed to be supported by the difficulties experienced. The fear of opening the pharynx prevents anything but the most careful dissection, and the depth of the vessel cramps the operation of the surgeon, who owes much to his assistants, the one dragging down the great cornu of the hyoid bone, the other holding up the sub-maxillary gland.

On the following day, 24 hours having elapsed, the left half of the tongue was found blue and bloodless, and it was removed with great ease with scissors, after slitting up the tongue with a long curved bistoury. So bloodless was it that the scissors cut through it, leaving a beefsteak-like gap in the organ as it proceeded; and there was no hæmorrhage at all, except when the anterior fauces was divided. A little oozing occurred at the tip, proving the correctness of the opinion that an anastomosis across the raphe takes place here. The mouth was painted with Whitehead's varnish, and

simply left in that condition. The patient never suffered the slightest discomfort, and I met him in the street on the ninth day. Since then no recurrence has taken place; and, indeed, the glands were hardly to be felt at the time of the operation.

Altogether the result of this operation is so encouraging as to lead us to hope that surgeons may devote their attention to improving the methods of finding and ligaturing the lingual vessels, rather than to devising complicated and difficult methods of removing the tongue, involving much loss of blood and a prolonged convalescence and the risks of septic pneumonia. It is certainly the ideal method of removing the tongue.

A CASE OF ABSENCE OF SOFT PALATE AND CLEFT TONGUE.

BY W. M. HELSHAM, M.R.C.S.E., L.R.C.P.
LOND., RICHMOND, N.S.W.

ON February 24th called to see an infant two days old, as the mother noticed the child was unable to suck, and fluids returned by the nose when given by the mouth.

Examination disclosed complete absence of soft palate, the position of the palate being represented by a large oval, window-shaped opening, through which the roof of the nasopharynx, with the projecting vomer, could be seen.

The free edge of the opening was attached by a fold on either side in front of the tonsil to the lower jaw, behind the position of the last molar tooth. The tongue was completely divided from behind forward to the extreme tip, where the two parts united, and were anchored short behind the gums.

On crying, the two halves rose in two ridges, almost meeting along their free borders, otherwise there was little or no movement in the organ.

Father a native of Japan, mother an Australian.

Child 8½ months, very small, but otherwise normal.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 29th April, at 8.15 p.m.

Business :—General.

GEO. E. BENNIE, Hon. Secretary.

A BRIEF HISTORY OF SMALLPOX AND VACCINATION IN NEW SOUTH WALES, FROM THE FOUNDATION OF THE COLONY TO THE PRESENT DAY.

BY GEORGE LANE MULLINS, M.A., M.D. TRINITY COLLEGE, DUBLIN, &c.; ASSISTANT PHYSICIAN, ST. VINCENT'S HOSPITAL, SYDNEY; PHYSICIAN TO THE HOSPICE FOR THE DYING.

(Continued from Vol. XVI., page 496, October, 1897.)

IX.—SMALLPOX IN RECENT YEARS.

SMALLPOX seems to have entirely disappeared from the Australian Continent between the years 1840-1877. Contemporary literature does not refer to the disease, so far as I am aware.

On December 12, 1876, a case of smallpox was discovered on board the s.s. Brisbane after her arrival in the port of Sydney. The vessel was immediately taken charge of by the police, and as soon as possible removed to the Quarantine Station at Spring Cove. The patient was landed on December 13, and died the following day. On the 18th December another case appeared on the boat. This was landed and isolated. All communication between the ship and the shore had ceased on the vessel being placed in quarantine. On the 30th of the month a case of smallpox appeared in a house on the wharf, almost immediately adjoining the wharf where the s.s. Brisbane had been berthed. The whole of the wharf, with all the buildings upon it, and those in the immediate neighbourhood, were immediately declared to be in quarantine.

On January 10, 1877, two girls named Holden, residing at Miller's Point, near the wharf where the Brisbane had berthed, showed symptoms of the disease. All the occupants of this house were removed to the hospital-ship Faraway. These two girls died, as did two more members of the same family, who were subsequently attacked.

During January, 1877, some cases of smallpox appeared on board H.M.S. Wolverine and Sappho. These were placed on board the hospital-schooner Conflict. In speaking of these cases, the *Sydney Morning Herald* of January 25, 1877, said: "With regard to the appearance of the disease on board the ships of war, it is said the War Authorities have obtained information which leads to the opinion that the sailor first attacked on board the Wolverine had been in contact with the Holden family at Miller's Point. All the other seamen

who have got the disease are supposed to have taken the contagion from this man. There is, however, another theory to account for the sudden appearance of the disease. The Wolverine left England with a clean bill of health, but it is suggested that the disease may have been conveyed by some of the shore clothing of the men, packed by persons who were unfortunately infected with smallpox. There is said to be a well-authenticated case on record where smallpox broke out on board an immigrant ship after she arrived in port, and the boxes that had been stowed in the hold were brought up and unpacked. It is stated that the seeds of contagion might remain dormant under such circumstances for several months, and then at last break out."

No further cases appear to have broken out, and the epidemic was soon at an end.

On the 25th May, 1881, a child named On Chong, living in Lower George-street, Sydney, was reported to be suffering from smallpox. The source of infection was obscure. The house and premises were placed in strict quarantine, and no further case was notified for a period of twenty days, when the disease appeared simultaneously in Surry Hills, Cumberland-street, Waterloo, and Circular Quay. A second period of twenty days then elapsed before the disease again showed itself, when between July 5 and 15 it appeared in seven houses, each situated in a different locality. From the middle of July, 1881, to the end of January, 1882—a period of about 200 days—121 cases occurred in different parts of Sydney and suburbs. Between May 25, and September 2, 1881, the disease occurred in the following localities:—Lower George-street, Surry Hills, Cumberland-street, Waterloo, Queen's-place, Drutt Town, Glebe, Sussex-street, Fowler-street, Macquarie-street South, Ultimo, Croydon, Woolloomooloo, Alexandria, Clarence-street, Barker's-lane, and Pyrmont. The disease principally attacked the labouring classes, including two Chinamen. There were in all during this epidemic no less than 154 cases of variola. Of these 114 recovered, and 40 died.

In the year 1881, the Infectious Disease Supervision Act (45 Victoria, No. 25) was passed. Power was given to the Governor to appoint a Board of Health, consisting of not less than six persons, to carry out the provisions of the Act. The first Board was composed as follows:—The Mayor of Sydney (Alderman John Harris), Chairman; Drs. C. K. Mackellar, Alfred Roberts, and A. A. West, Mr. J. Barnett (Colonial Architect), Mr. E. Fosbery (Inspector-General of Police), the Hon. Geoffrey

Eagar (Under-Secretary for Finance and Trade), with Mr. R. M. Ross as Secretary of the Board. About this time the Sanatorium at Little Bay was proclaimed a smallpox hospital, under the charge of Dr. J. A. Beattie.

The *Australasian Medical Gazette*, January, 1882, reported that a case of smallpox had occurred at Bega, 255 miles south of Sydney. It was supposed that a relative of the patient, only recently returned from Sydney, where she had resided next to an infected house, had carried the infection to the district.

In 1883 the disease again made its appearance. The first case showed itself on August 23, and from that date to September 16 fourteen cases were removed and isolated from time to time. An interval of six weeks then ensued, but on October 25 another case was reported. An infant ten months old, in the same house, then developed the disease on November 1. The disease was not recognised, and in consequence the other members of the family were allowed to continue their usual occupations. The result was as follows:—"Two of the patient's sisters and a brother attended the Crown-street Public School, which is the largest in the colony, during the whole of his illness, ceasing their attendance only on the twentieth day of it. These three children were in three different classes, and in each class cases of smallpox arose, namely, in one class two girls, in another (infants) a girl and a boy, and in the third one boy, were seized; and in addition a girl was attacked who was not in any of these classes, but who was exposed to contact with J. C.'s (the infant) sisters during play hours. The adult members of J. C.'s family carried the infection to five other households, a member of one of which fell sick while at Moss Vale, a hundred miles from Sydney, and there infected the resident whom she was visiting. Yet two other families were infected by this child, but under slightly different circumstances; one, residing at Leichhardt, was infected through the father, who was summoned to J. C.'s to pursue his trade in the very room in which the latter lay sick; and two persons fell ill in the house next door to J. C.'s. Thus from this single case were infected no less than thirteen distinct households, and nineteen different persons, of whom one died."*

I believe that the cases enumerated above are the only ones which have ever appeared within the metropolis. Cases have entered the Heads on shipboard at various times, but they have been immediately quarantined at North Head, and the disease did not gain a footing on shore.

*Report of Medical Adviser to the Government on Vaccination, 84.

X.—VACCINATION STATISTICS.

Among the Parliamentary Papers for 1868-69 is to be found a despatch from the Duke of Buckingham, Secretary of State for the Colonies, transmitting the Imperial Vaccination Act, 1867, and suggesting that it might seem desirable that a like measure should be enacted for New South Wales. For some reason this suggestion has never been acted upon to the present day, probably owing to the fact that smallpox has never become a scourge in our midst.

The following table shows the number of births during thirty-six years from 1861 to 1896, and the number of vaccinations performed by Government Vaccinators during the same period:—

Year.	Births.	Vaccinations.	Proportion of Vaccinations to every 100 Births registered.
1861	14,681	2,349	16·00
1862	15,434	3,155	20·44
1863	15,679	12,970	82·72
1864	16,881	10,696	63·36
1865	17,283	8,867	48·41
1866	16,950	7,606	44·87
1867	18,317	6,931	37·83
1868	18,485	11,237	60·79
1869	19,243	21,507	111·76
1870	19,648	7,084	36·54
1871	20,143	6,482	32·16
1872	20,250	17,565	86·74
1873	21,444	3,152	14·69
1874	22,178	4,832	21·78
1875	22,528	3,111	18·80
1876	23,298	4,861	18·71
1877	23,851	16,881	70·77
1878	25,328	3,512	13·86
1879	26,933	5,569	20·67
1880	28,162	5,029	17·85
1881	28,993	61,239	211·21
1882	29,702	2,188	7·36
1883	31,281	882	2·81
1884	33,946	7,055	20·78
1885	35,043	2,230	6·36
1886	36,284	1,763	4·85
1887	37,236	3,230	8·67
1888	38,526	2,186	5·67
1889	37,295	2,404	6·45
1890	38,960	2,197	5·64
1891	39,458	1,567	3·97
1892	40,041	4,014	10·02
1893	40,342	2,547	6·31
1894	38,952	1,957	5·02
1895	38,715	2,437	6·29
1896	36,613	945	2·59
Total ...	988,102	258,821	

There is reason to believe that the number of vaccinations made by private practitioners would not materially alter the above figures.

New South Wales is the only Australian colony in which a Compulsory Vaccination Act has never been put upon the Statute Book.

XI.—CONCLUSION.

In writing this short history of smallpox and vaccination in New South Wales, I have directed attention chiefly to the early appearances of the disease, and to the introduction of vaccination. I have not attempted to write a complete history, but if my articles have been the means of creating an interest in the origin of Australian diseases I shall feel that my work has not been in vain.

Fuller information on the events of the past fifteen or sixteen years is to be found in the Annual Reports of the N.S.W. Board of Health.

NOTES ON A CASE OF BERI-BERI.

BY JOHN FREDERICK NALL, F.R.C.S. ENG.,
CLAYFIELD, BRISBANE.

I AM afraid these notes are now somewhat out of date, and I am sorry I cannot bring the patient for you to see to-night, as he has now returned to his station up country. As the interest turns upon the diagnosis, I should have liked to have shown the patient.

Beri-beri has been recognised in Victoria, New South Wales, West Australia, but I think not in South Australia, nor, as far as I can ascertain, *previously* in Queensland.

Now, however, four months after this patient was seen and these notes made, it appears that beri-beri has been recognised in an epidemic form in the Western and Central districts of Queensland.

I have, since Christmas, seen two notes in the Brisbane *Telegraph* newspaper, and this note appeared *yesterday* (March 30) in the *Courier* :—

BLACKALL, March 30.

The disease known as beri-beri is increasing in the Central and Western districts. In January, at Winton, there were four cases in the hospital and four in the town. Dr. —, health officer to the Municipality of Blackall, has reported several cases, and at Isisford, recently, nine cases have come under observation, resulting in one death. To-day's *Barcoo Independent* draws attention to the spread of this disease, and urges an inquiry by the Central Board of Health.

I have seen no notice, however, in any medical journal.

My patient, a young man of 20 years, came under my notice accidentally. I was attending his married sister, when his mother asked me if I knew much about "bush scurvy." I replied that I presumed bush scurvy was not unlike ordinary scurvy, with which I was familiar, and I asked questions about her son. The result was that I expressed my opinion

that her son was not suffering from scurvy at all. A few days later, on December 13th last year, the young man came to see me, and gave the following history :—

He was engaged at Bulli-Wallah Station, near Clermont, at the time of the commencement of his illness. He did not live at the head station, but camped, with several others, upon land which during wet weather was a swamp, and situated some miles from the station.

Their food supply consisted of the ordinary station rations (beef, damper, &c.) ; their water supply was drawn from a well in the marsh, and the water was described as very foul.

At this time the weather was dry, and little rain had fallen for some months past. Last September his illness began with swelling in the legs, paresis of the lower extremities, numbness, and anæsthesia. So weak did his legs become, that he was unable to walk, and so well marked was the anæsthesia, that when he cut his skin with a knife, he could not feel the wound. This went on for some time, and he got worse instead of better. At the same time (end of September, 1897), his companions were taken ill with similar symptoms.

Altogether, there were five men ill :—

1. My patient (W.C.), aged 20 years.
2. M. P., aged about 40.
3. Percy, a half-caste aboriginal.
- 4 and 5. Two other station hands.

M. P. went to the head station, and a day or two after my patient followed him. My patient was then so weak that he could not walk, and had no power of feeling below his knees. He crawled on his hands and knees, and had to be lifted upon an old station horse, and thus rode to the head station. When he arrived there he heard that M. P. had died suddenly, and this so frightened him that he at once set off for his home in Brisbane.

He saw no medical man until he came under my notice. He arrived in Brisbane in the latter part of October, and I saw him on the 13th December. During the weeks that had elapsed he had been under the care of his mother, whose treatment had consisted in rest and vegetable diet.

The following were my notes on December 13 :—W.C., well-built young man, 20 years of age, dark complexion, fairly nourished. No history of former illnesses (never a severe illness in his life). *Never had diphtheria, gonorrhœa, nor syphilis.*

Eyes.—Sight good, pupil reaction normal.

Mouth.—No lead line about gums, and no sign of sponginess.

Chest.—No cardiac murmurs; no abnormal signs.

Urine.—Normal.

Arms.—Free from signs of paralysis or anæsthesia.

Legs.—Above the knee nothing noticeable. Below knee the muscles were apparently wasted. There was slight œdema over the upper part of tibia, but none about the ankles.

There was no very apparent anæsthesia at this time, but slightly impaired sensation, as detected by touching with the points of a pair of compasses. There was slight tenderness when the calf muscles were pinched.

Patellar reflexes were quite absent in both knees. When told to walk patient appeared to walk with evident weakness in the legs, but there was no sign of an ataxic gait. I did not notice any tenderness nor swelling in connection with nerve trunks.

I did not test for reaction of degeneration, as I had no galvanic battery at hand, but with a faradic battery there was well-marked diminution of muscular contraction in both legs.

Under the circumstances, I told the man he had beri-beri, and that his illness had nothing to do with scurvy. I gave him a mixture containing nitro-hydrochloric acid and strychnine.

He returned to his work at the beginning of the present year, cured.

I have not yet been able to obtain any information about the other men, though I asked my patient to put me in communication with them. He, however, declared that they were affected quite similarly to himself.

With regard to the diagnosis, it appeared to me to rest between beri-beri and some form of peripheral neuritis, such as alcoholic neuritis or the neuritis due to a mineral poison, as lead or arsenic; or to a morbid poison or toxin, such as that of diphtheria; or the sequel of an acute disease, such as, possibly, dengue (which is now so prevalent), or one of the fevers.

All these latter I excluded. The man never touched alcohol, nor had had contact with metallic poisons, as far as one could ascertain. Also, I knew of no other disease except beri-beri the symptoms of which are an epidemic of paresis and anæsthesia of lower extremities, with œdema.

Looking at the medical journals, I find, within the last few years, accounts of epidemics of beri-beri both in Great Britain and the Australian colonies.

Of course, sporadic cases of beri-beri are seen in London and other English ports from

time to time; but in the *British Medical Journals* for 1894 there are full accounts of an epidemic of beri-beri which attacked many people in the Richmond District Lunatic Asylum, Dublin, and which was the cause of 23 deaths.

In recent numbers of the *Australasian Medical Gazette* there was a correspondence, in which Drs. Jamieson and Corlette took part, having reference to the treatment by the former of beri-beri in Sydney by large doses of strychnine, from reading which I assume that both gentlemen are familiar with beri-beri in Sydney.

Dr. Molloy, of the Melbourne Hospital, is quoted in the *British Medical Journal* as having mentioned, as far back as March, 1888, that nine Chinese from a certain ship in Melbourne had been taken to hospital, suffering from peripheral neuritis and œdema, and that subsequently a series of similar cases had cropped up in Melbourne.

In October, 1894, Dr. Wetherell describes, in the *British Medical Journal*, an epidemic of beri-beri among aborigines at the gaol, Windham, Western Australia. This outbreak did not spread to the neighbouring white population; but it is of interest to note the insanitary surroundings of those aboriginal prisoners. They were, to the number of 60, chained up at night in a shed, and supplied with two buckets for every three men. One bucket was for drinking water, and the other bucket for their excreta. The prison shed was built upon a marsh.

In the *British Medical Journal* of August 14, 1897, is an interesting account by Dr. Neil McLeod, of Shanghai, of an outbreak of beri-beri confined to the officers on the ship *Aveona*, which had previously visited an Australian port. The interest in this case was the fact that the officers in the saloon were attacked, and one man died, while the seamen in the fore-castle escaped. Dr. McLeod endeavoured to show that beri-beri was a food and not a place disease. In a leading article in the same number of the journal, the London editor of the *British Medical Journal* says: "*Australia must now be regarded as a beri-beri country.*"

Beri-beri is usually, I believe, associated with heat, damp, and unhealthy surroundings, such as overcrowding and filth.

At first sight a small camp on an Australian station does not appear the most likely place for an epidemic. The question of how the poison was introduced is interesting. There was no history of a Chinese cook or gardener being employed for more than a year previously,

or contact with other Asiatics or Kanakas ; but my patient said that some weeks previously the station had been visited by a half-caste swagman, who was, he thought, affected in a way similar to that of his own subsequent illness. This man disappeared and left no trace.

There is a very good account of beri-beri in Davidson's "Hygiene and Diseases of Warm Climates." He devotes 50 pages to the matter. He sums up as follows:—"In tropical and sub-tropical countries in which beri-beri is known to occur, where complaint is made of weakness of the legs, numbness of the shins, and puffiness over the tibiae, the idea of beri-beri ought to present itself to the mind of the physician. . . . If several cases be found presenting symptoms resembling those of the patient first brought under notice, there can be little doubt that the first case, as well as the others, is beri-beri. In the fully-developed disease there is no difficulty, as a rule, in diagnosis ; but the earlier phases are difficult to pronounce on, unless it be found that several members of a community are similarly affected."

EARLY ECTOPIC GESTATION.

By F. BATCHELOR, M.D., LECTURER ON MIDWIFERY AND GYNÆCOLOGY, UNIVERSITY OF OTAGO, N.Z.

READ AT THE ANNUAL MEETING OF THE N.Z. BRANCH BRITISH MEDICAL ASSOCIATION, HELD IN NELSON, 9TH TO 12TH MARCH, 1897.

WHEN your Secretary did me the honour to request me to open a discussion upon "Early Ectopic Gestation" I was considerably exercised in my mind as to whether to attempt a synopsis of some of the very copious recent literature on this subject, or to base my paper on a somewhat limited personal experience.

I believe the latter course will prove more acceptable to this meeting, and if my views seem founded on somewhat slender evidence they are the more likely to evoke an animated discussion.

It will be well, possibly, to introduce my subject by a very brief outline of the history of ectopic gestation.

We find cases of extra-uterine foetation recorded very early in medical history. Prime-rose operated by abdominal section upon a case in 1594, and numerous cases have been reported sporadically since. In all these earlier cases, however, gestation seems to have gone on to term, and the diagnosis, from some accident or other, was very obvious.

Dr. John Burns, of Glasgow, appears to be one of the first who recognised and described ectopic gestation, with its consequent accidents, in the earlier stages.

Blundell, in 1830, writing on the condition, said "he had no doubt that many women died in this way, but, being buried without examination, the real cause of their death is never ascertained." He also suggested abdominal incision for taking means to arrest the hæmorrhage.

Coming to more modern writers, the memoir of M. Bernutz, in 1848, dealing with the subject of retro-uterine hæmatocele, is the first attempt to classify peri-uterine hæmorrhages on a basis of cause and localization. The subject is very fully dwelt upon by this writer somewhat later in a work on "Diseases of Women," by MM. Bernutz and Goupil—Part II., on "Peri-uterine Hæmatocele," being written by Bernutz ; Part III., on "Intra-pelvic Hæmorrhages occurring in Extra-uterine Pregnancies," being from the pen of M. Goupil.

The work of these now famous authors seems to have met the same fate as their advanced views on tubal disease, published in the same volume. For a number of years it was consigned to oblivion, and it was left to our famous countryman, Mr. Lawson Tait, to bring prominently before the profession, and, by the brilliant success of his surgical measures, to enforce the frequency and importance of these conditions on the professional mind.

Mr. Lawson Tait's first operation for early ectopic gestation took place on January 17th, 1883, and in an article in the *British Medical Journal* of June 28th, 1894, he related a series of cases where he had successfully performed abdominal section for the arrest of hæmorrhage, and it is from this date, but little more than twelve years ago, that the whole literature of the subject has sprung.

The cases upon which I have founded my paper are fourteen in number, all of which have occurred directly in my own practice ; in addition to these, I have been associated, in consultation or otherwise, with some half dozen others.

The accompanying table includes all cases which have been under my personal care of which I have full notes.

To facilitate discussion, the paper is divided under three heads, namely, *Diagnosis*, *Prognosis*, and *Treatment*.

DIAGNOSIS must be considered before and after rupture of the foetal sac ; for practical purposes it is well to consider the tubal variety only.

Period of Rupture.—This seems to depend largely upon the position in the tube where the lodgment of the embryo occurs; if in the narrow portion near the uterus, where the walls are thick and the calibre small, rupture may occur early, probably at the sixth or seventh week. Further down the tube, where more dilated and the walls thinner and distensile, pregnancy may advance to the twelfth or fourteenth week.

Prior to rupture, so far as I can judge, a correct diagnosis is purely an accident; patients present no unusual symptoms that lead them to seek medical aid. We are told the symptoms of unruptured sac are those of ordinary pregnancy plus one or two distinctive signs, to which I will presently refer.

First: *Cessation of Menstruation.*—This symptom is very liable to mislead. In most of my cases there has been delayed menstruation, followed by menorrhagia or metrorrhagia, but not, as a rule, of such a type as to give rise to anxiety.

Second: *Morning sickness* has been generally absent.

Third: *Mammary Changes.*—So far as I can gather, they do not seem to have been at all well marked prior to rupture, and after rupture they usually entirely disappear.

Fourth: *Engorgement of the Pelvic Venous System.*—Softening and enlargement of the uterus have been observed in most cases after rupture, so I presume they existed also prior to its occurrence.

Now a word as to what are considered to be the distinctive signs.

Pelvic Pain.—In not a single case could I discover any history of pelvic pain prior to rupture.

Shedding of the Uterine Decidua.—This was noticed in three or four cases, and was usually accompanied by menorrhagia, the patient being under the impression that she had aborted. In most cases, however, no membrane had been noticed, or where it had come away it had escaped after rupture. The recognition of such a membrane would, to my mind, be the strongest objective evidence of the condition, but attention is very rarely drawn to it by the patient.

Recognition of a Pelvic Tumour.—If evidence had been sufficiently strong to excite suspicion, and by examination a tubal enlargement was detected, it is quite conceivable that a correct diagnosis might be made. It is seldom, however, that a patient calls in medical aid, in consequence of the trivial character of the symptoms;

hence a diagnosis prior to rupture may be looked upon as accidental.

Mr. Lawson Tait says that in all the cases he had operated upon, and in many where he had seen the *P. M.* examination and known the history, the patient made no complaint till the alarming symptoms of rupture had set in.

In July, 1889, I operated upon a case of supposed ectopic gestation where my colleagues and myself considered the symptoms very characteristic of an unruptured tubal gestation. It proved to be a case of small ovarian cyst.

After Rupture.—The symptoms, as a rule, develop rapidly and are well marked. They are, first, pain, usually of a severe character; second, shock and general indications of internal hæmorrhage; third, the presence of a more or less well-defined tumour, by pelvic examination. The prominence of one or other of these symptoms depends largely upon the site of the rupture.

In the extra-peritoneal form, where blood is effused between the layers of the meso-salpinx, and splits up the broad ligament, the pain will be the most characteristic symptom, and where the effusion is large and tension great, it is oftentimes most severe.

The effusion may so lift up the peritoneum as to form a tumour recognisable externally above the pelvic brim. Where the trouble starts on the left side, it frequently passes backwards and surrounds the rectum, producing a stricture, which may be felt from three to four inches from the anal orifice.

When an examination is made soon after rupture, a diagnosis is not, as a rule, very difficult. One or other of the symptoms of early pregnancy may be recognised; the rapid effusion is very characteristic, and there is an absence of marked constitutional disturbance.

After a week or two, however, many more difficulties will arise which are apt to confuse the diagnosis; inflammatory changes are set up by the blood clot, and it is difficult to differentiate between them and a cellulitis or pelvic peritonitis or pus tube.

Symptoms of pregnancy, if they have existed, disappear. In several of the cases where I operated under these conditions, the diagnosis was merely a surmise.

In the intra-peritoneal form, especially that class of case where a large bleeding occurs, the symptoms are most characteristic. The patient rapidly becomes intensely anæmic, with symptoms of shock and collapse; the abdomen, as a rule, quickly becomes distended, partly from diffused blood and partly from tympanites, the result probably of paralysis of the bowel. The

symptoms may simulate acute general peritonitis.

On examination at this stage dulness will be found in the loins, and, by vaginal examination, the uterus will be felt lifted high in the pelvis by the liquid blood in Douglas' pouch, in which it may be felt floating by bimanual manipulation.

The condition is most alarming, and it is in this eclamptic form, doubtless, that the sudden deaths that have been recorded have occurred. If the case is seen in daylight, the intensely-blanching appearance, so marked in the mucous membranes, renders the diagnosis of internal hæmorrhage an easy matter. By artificial light, however, the condition is not so evident, and may be mistaken for the collapse of peritonitis or acute poisoning.

I am convinced that every case of rupture into the peritoneal cavity is not necessarily followed by this dangerous condition. Smaller hæmorrhages do occur where blood gravitates into Douglas' pouch and becomes encapsuled or roofed over by viscera and fibrinous exudations. The extent of the laceration, and the state of development of the chorionic villi, must be important factors in determining the amount of the hæmorrhage.

Prognosis must be considered under two heads—*Extra-peritoneal or Ligamentous form*, and the *Intra-peritoneal form*.

In the larger number of cases of *Extra-peritoneal Hæmorrhage*, the result of rupture of a fetal sac, spontaneous cure will eventuate if the patient's surroundings are in any way favourable. Recovery may be prolonged, tedious, and accompanied by many accidents, but still in the large bulk of cases it may be expected.

In several cases where I have operated I am convinced that, with more time and patience, surgical interference would not have been needed. The embryo, we know, is often absorbed, and a mass of blood-clot and chorionic villi are the only indications whereby the diagnosis is decided. A few years since, these cases were all classified under the heading of pelvic hæmatocele, and spontaneous recovery was the rule.

What are the accidents, and how are the structures left, as the result of this condition?

In some few rare cases, where the hæmorrhage apparently has only destroyed a limited portion of the chorion, fetal development has continued to term. To this form I need not refer.

A much more common accident is infection of the blood clot, and septic changes therein,

and especially is this liable to occur where the hæmorrhage is on the left side, and the clot is consequently brought into close relation to the rectum, for which, doubtless, the bacillus communis coli is answerable.

After suppuration, evacuation may occur through the bowel or other pelvic viscera, and recovery will probably be tedious.

In Case No. XII. of my series there was a curious error in diagnosis. In the first instance the diagnosis lay between a ruptured ectopic gestation and a malignant growth high up the rectum. By means of Kelly's long rectal speculum, a view was obtained of the rectum at the site of stricture, and a fungoid-like bleeding mass was seen sprouting from the anterior rectal wall. In consequence of this, a diagnosis of malignant disease was arrived at.

Subsequently, however, the passage of a number of fetal bones, coincident with decrease in the pelvic tumour, showed our first opinion was correct.

In what condition are the appendages left on the damaged side after recovery from this accident?

Up to the present, on this point we have little evidence, but it may prove a strong indication for operation in those cases in which surgical interference might otherwise be viewed as unnecessary.

As to the *Intra-peritoneal Form of Rupture*, and dealing first with the eclamptic variety.

While authorities view ectopic gestation as a highly dangerous condition, it is well recognised that a large proportion of cases may undergo spontaneous cure. The eclamptic intra-peritoneal form all view as the most alarming, and many speak of it as being uniformly fatal if left to Nature.

With this extreme view I entirely disagree. Of my fourteen cases, ten were varieties of intra-peritoneal hæmorrhage—one from tubal abortion; four, secondary rupture from the broad ligament; five, direct intra-peritoneal, and of these five, three only were eclamptic in type. (A fourth I attended in conjunction with Dr. Barnet.) These patients were at one time blanched, pulseless, and almost moribund. Desperate as their condition was, it appears to me that it is quite conceivable recovery might have taken place without surgical interference. In Case No. I., which occurred several years before operation for ectopic gestation had become a recognised procedure, the patient had three desperate attacks of hæmorrhage. The physical signs and history were those of extra-uterine gestation. A diagnosis was made, and an operation, even at that early date, suggested,

but, fortunately for the patient possibly, not undertaken; and, although for many weeks apparently on the brink of the grave, she eventually recovered under rest, astringents, and sedatives, and is alive to this day.

In the other three, with the eclamptic form of hæmorrhage, all certainly made excellent recoveries after operation, but their condition, so far as I can remember, could not possibly have been worse than that of Case No. I.

Of the remaining seven cases, none were in immediate danger from the hæmorrhage, and there was no reason why absorption of the effused materials might not have occurred. This opinion will seem to many little less than rank heresy, but let me advance two lines of argument in support of my contention.

Until the year 1891 I had never deliberately operated for ruptured ectopic gestation, and although for some fifteen years engaged in a large general practice, and for some six years later in special gynecological work, where a considerable number of cases diagnosed as pelvic hæmatocele came under my charge, I can never remember a single death that I could directly or indirectly attribute to pelvic hæmatocele, or the rupture of an extra-uterine foetal sac. The case, No. I., already quoted, and as bad as any that I can since remember, and which would at once be treated by abdominal incision now-a-days, recovered spontaneously.

Then take the statistics of some of the old writers—West's work on "Diseases of Women," for instance, published in 1856.

Under the heading, "Uterine Hæmatocele," are included all forms of peri-uterine hæmorrhage, from whatever cause. In the light of modern literature, there can be little doubt that the bulk of these were cases of one form or another of ruptured ectopic gestation.

Now, West collected statistics of 103 cases of hæmatocele, of which only 20 proved fatal, and he adds, "There can, I apprehend, be little doubt that its usual fatality is considerably less than would appear from these imperfect data; for, on the one hand, some of the cases have been reported as pathological rarities, and, on the other, many which have had a favourable issue have been unrecorded." "Many, too, have certainly passed unrecorded."

Further on he gives 55 cases of uterine hæmatocele treated on the expectant plan, of which 12 died, three from altogether extraneous causes; the remainder: one abscess, one pyæmia, one hæmorrhage from the vagina, one rupture into peritoneum and peritonitis, two peritonitis without cyst rupture.

Of 48 cases where puncture was employed,

eight died, two of these only directly from hæmorrhage. To me it seems that these statistics, together with my own personal experience already quoted, tend to prove that ruptured ectopic gestation is by no means the necessarily fatal condition generally believed.

TREATMENT.—Under this heading it is my intention to refer only to cases where rupture has already occurred. The first main point for decision is the need for operative procedure.

Under favourable conditions, granted good assistance, proper nursing and surroundings, with experience in abdominal surgery on the part of the operator, we know that mere opening of the abdomen is a measure unattended by appreciable risk; yet it appears to me the normal tendency to spontaneous cure is in danger of being too much overlooked. We have, possibly, been a little carried away by the enthusiasm which has resulted from the numbers of brilliant surgical successes which are being daily recorded.

I would go so far as to say that, even in the eclamptic form, where the patient happens to reside in an inaccessible spot, where appropriate surgical aid is difficult or impossible to secure, it is wiser to trust to expectant treatment than to those rough-and-ready methods which the patient's environments so often entail.

On the other hand, in town practice, where suitable assistance is procurable and the surroundings favourable, in the eclamptic form, at any rate, the sooner operation is undertaken, consistent with due preparation, the better. The collapsed state of the patient will not permit temporising until reaction occurs; the mere presence of a large quantity of fluid blood in the peritoneum intensifies the prostration, and its evacuation affords immediate relief.

The first and essential step of the operation, after the abdominal cavity is reached, is to at once control the circulation of ovarian vessels on the side of the rupture by means of a good clamp, and then to proceed more leisurely to remove clot, sac, with foetal debris, and ligature the vessels.

Large intra-venous or intra-cellular saline injections, three pints or more, are of immense value in combating the collapse once the bleeding has been arrested.

In the intra-ligamentous form of rupture at the present time I feel convinced we operate too frequently. Our diagnosis is so often at fault, the case is mistaken for one of pelvic peritonitis, cellulitis, or salpingitis, and operation undertaken for these conditions. What we really want to know is:—

First: How we can diagnose ruptured ectopic

gestation when the case comes under our observation some weeks after the accident; when can it be left alone with a fair prospect of spontaneous recovery; and in what condition are the uterine appendages left after such spontaneous cure?

I must apologise for the fragmentary character of this paper. It is, of course, impossible to deal exhaustively with this important topic in the necessarily short time allowed to the introducer of the discussion. Further, the somewhat short notice which I received for its preparation has been seriously curtailed by stress of other duties.

CASE OF ECTOPIC GESTATION.

By T. C. MOORE, M.D., NAPIER, N.Z.

READ AT THE ANNUAL MEETING OF THE N.Z. BRANCH BRITISH MEDICAL ASSOCIATION, AT NELSON, MARCH, 1897.

THE case I have the honour to bring before you will not detain you very long. It is a case of ectopic gestation, and such cases, verified by operation, are sufficiently uncommon to be worth recording. The patient, Mrs. S., was in her 34th year. She had been married seven years, and had had three children. Until the birth of her last child, two years and 10 months before operation, she was an exceptionally strong and healthy woman. In her last confinement she was attended by a woman, and rather neglected, afterwards having evidently suffered from some inflammatory trouble, and since then she has never been right; her menses have been profuse, irregular, and accompanied with pain, especially the day before the appearance of the flow. She had a miscarriage in August, 1892, and two since, the last on the 2nd September, of 1893, after which I curetted the womb, which benefited her greatly, and she was six weeks without pain, and without seeing anything. On the morning of the 26th October last, during my absence, Dr. Milne Thomson was summoned hastily, and attended her for symptoms of miscarriage; she then believed herself to be seven or eight weeks pregnant. There were regular pains and hæmorrhage. I saw her two days after, on the 28th October, and could only get a very imperfect examination, as she was excessively tender and sensitive to the touch, but could make out swelling behind and at the sides of the uterus. For several days she had acute attacks of pain, only relieved by opium and turpentine enemata. I had her removed to hospital as soon as she would consent to go, on the 26th of November, and there she was

examined under chloroform by Dr. Menzies, the Surgeon Superintendent, Dr. Milne Thomson, and myself. There could be felt in Douglas' pouch a moderately-soft, boggy, irregularly-rounded tumour, not unlike the fundus of a retroverted uterus; the sound passed slightly forwards, a little over the normal length. An inflamed and distended tube was diagnosed, and it was decided to operate as soon as her condition warranted it, and suitable arrangements could be made. The operation was performed on the 26th of January, up to which date she had been suffering almost constant pain, chiefly referred to the left ovarian region, and almost continually unwell. I had the advantage of Dr. Cleghorn's assistance and advice; Dr. Milne Thomson gave chloroform, and Drs. De Lisle and Reed were also present. Antiseptics, Lister's method, were carried out as completely as possible. The abdomen was opened in the middle line. The left ovary and tube were fairly normal, but on feeling along the right tube it was found to bend suddenly at an acute angle, and expand into an enlargement, which filled up Douglas' pouch. The adhesions, which were recent, were easily separated by the finger, the tube and ovary brought outside, tied and removed. No drainage was used. The incision was closed by stitching the peritoneum and muscles with continuous catgut suture, and the skin with salmon gut interrupted stitches in the ordinary way. On the seventh day the sutures were removed, and the patient made an uninterrupted recovery.

CASE OF ECTOPIC GESTATION—RUPTURE ABOUT EIGHTH WEEK—OPERATION—CURE

By H. B. LEATHAM, M.R.C.S. ENG., NEW PLYMOUTH, N.Z.

MRS. E—, æt. about 26. Married about six years. One child four years old, one miscarriage (doubtful).

Previous history good. Strong woman, lives on farm, rides a good deal. Has been treated for cervical erosion.

December 11.—Menses came on for one hour, she being then 10 days overdue, and thought she was pregnant; some pain.

13th.—Flow again for one hour; slight pain left ovarian region.

15th.—Flow slight and intermittent, pains very severe; sent to me for soothing medicine, which relieved her.

16th.—Pain so severe sent for me to visit her, ten miles away from town.

I examined and found a good deal of bloody discharge; left ovarian region felt hard and full, very tender internally and externally. Told her to come to town at earliest. Then got better, and did not come in till about 10 days after, as she felt better.

January 1.—Consultation with Dr. J. McN. Christie, who gave chloroform. We found tumour in left ovarian region. She had passed membranous substance from uterus. Could find no vaginal pulsation, though we looked specially for this, and made note of absence of this sign. *Advised operation* on two days after. No signs of rupture till evening of same day, when she got up, contrary to orders, and I was sent for on account of pain. Put to bed, gave sedative, and better. Felt faint, she said, but symptoms not so alarming as to necessitate operation till arranged.

January 3rd.—Laparotomy. Quantity fluid dark blood in peritoneal cavity. Tumour size of an egg, occupying outer side left tube. Ligatured and removed; found small rupture below and behind (and intra-peritoneal); some recent clot causing slight adhesion to omentum, and also to pelvic wall; separated easily. Closed wound; no drainage; dressed Iodoform and gauze. operation aseptic. Temperature never rose above 99°, and pulse above 90. No food for 2½ days, then enemas of Bovril every three hours. Recovery uninterrupted.

ECTOPIC GESTATION OF THIRTEEN MONTHS—SUPPURATION—CURE.

By A. MARTIN, M.D., WELLINGTON, N.Z.
READ AT THE ANNUAL MEETING OF THE N.Z.
BRANCH OF THE BRITISH MEDICAL ASSOCIATION,
MARCH, 1898.

Mrs. H. S., aged 29; married 11 years.

Family History.—Mother alive and in good health, age 49; father died from result of accident about the age of 35.

Personal History.—Menstruation commenced about the 14th year. Was always regular, and unattended with pain or discomfort. About four months after marriage, miscarried, and was told that the foetus was only some few weeks old. Following this, there was an interruption of menstruation for one period. Three and a half years after marriage she was delivered of a son, who is now alive. Her confinement was followed by the usual cessation of the menses for a short period, appearing at the end of the fifth week, and remained constant in their reappearance until the early part of June, 1893, which brings us to her present illness.

At that month (June) menstruation ceased, and in the following August patient became conscious of getting stout, and herself noticed that the increase was more on the left side. In the month of July there was a slight loss of blood lasting one day, and up to February, 1894, she suffered at varying intervals from slight hæmorrhages, which never—with the exception of June and July—lasted the whole day. At the beginning of November she experienced movements akin to those of quickening, which, persisting up to April, suddenly ceased. In reference to these movements, the patient says that at no time were they so severe as those experienced in her previous confinement, though in every particular similar in character. At the beginning of April there was experienced a sensation of the descent of the uterus and contents into the pelvis, such as had happened in her previous confinement. At the end of May, hæmorrhage appeared again, lasting about one day. At this period the patient called in Dr. Mackin, with a view to arranging for his services at her confinement, who, after hearing her story, and taking her temperature, and finding it to be 102°, asked me to see her in consultation, and the following is a brief summary of her condition:—

A small-developed woman, with pale, sallow, and anxious countenance; T. 102°, P. 90; and complaining of great pain in the abdomen, which, on external examination, revealed a swelling of the size of the ordinary full-time pregnancy, with a decided preponderance on the left side. Per vaginam, everything indicated a normal pregnancy. A hard, resisting mass (taken to be the head) was felt through the walls of the uterus, the os of which was undilated, but situated more on the right side of the pelvis than usual. Further, there was distinct fluctuation over the side of the abdominal tumour. After a few days of careful watching by Dr. Mackin, and as the temperature kept up between 100° and 103°, and the patient was suffering great pain, and the possibility of ectopic gestation being entertained, the patient was removed to the hospital, where she came under my care in July.

Having regard to the history of the case, I decided to clear up the question of pregnancy by dilating the uterus. This was done on the succeeding day of her admission, and resulted in my finding nothing in the interior of a uterus developed in length by measurement to about 10 inches. Her condition remaining about the same as on admission, with the persistence of high temperature, after consultation—at which time aspiration was resorted to, the

first puncture giving negative results, though the needle felt to be perforating some hard, resisting substance; the second essay drew off some very foetid pus—the preponderance of opinion was in favour of suppurating ovarian tumour. However, there was no discord as to the treatment, and abdominal section was decided upon. On opening the abdomen, what appeared to be the distended uterus of pregnancy came into view, and examination showed it to be unconnected with the uterine appendages, as, at the outside limit on either side, both ovaries and Fallopian tubes could be traced. In fact, it looked as if you had a full-time developed pregnant uterus, with a distension of the wall of the left side. Considering this corroborative of one's diagnosis of ectopic gestation, I proceeded to operate in the following manner:—

The abdominal incision was extended to the length of eight inches, and as there was some oozing from the punctures of the aspiratory wounds, between the tumour and wall of the abdomen, sponges, carefully antiseptised, were placed. Then the whole of the area of the tumour exposed was sewn to the abdominal wall, the sponges being removed during this stage when necessary. Thus, the contents of the tumour were shut off from the peritoneal cavity. This accomplished, an incision as long as the external one was made into the tumour, from which escaped about a pint of most foetid pus, and after douching with antiseptic fluid, and introducing the hand, it was evident that we had to deal with a case of extra-uterine foetation. First was removed the suppurating placenta, which was entirely detached from the walls of the cavity, and then the foetus. Some difficulty was experienced in the latter by reason of the size of the same, and my desire not to increase the extent of the abdominal wound at this stage of the operation, which would have necessitated further stitching of the sac, as well as running the risk of the introduction of foetid pus into the peritoneal cavity. However, delivery of the foetus was successfully accomplished without the necessity of lengthening the incision, and, after copious irrigation with carbolic lotion, the cavity was plugged with iodoform gauze, and dressed in the usual method.

The foetus was fully developed, showing signs of suppuration of the epidermis, and weighed five and a half pounds. I shall not weary you with the subsequent progress of the case, further than to mention that after 48 hours a long drainage tube replaced the plugging of gauze, and to say that the patient

made an uninterrupted recovery, her temperature never rising above 99°.

During the later weeks of her convalescence it was possible to make out the probable situation of the pseudo-uterine cavity, for, on passing a sound into the uterus, it could be felt at the right side of the cavity and extended for about eight inches, and on passing a probe through the abdominal wound, which passed for about ten inches, it could be felt on the left side of the pelvic cavity as if it were in the wall of the uterus.

DISCUSSION ON DR. BATCHELOR'S PAPER ON "EARLY ECTOPIC GESTATION" (See page 151).

In the absence of Dr. Batchelor, the paper was read by Dr. Ferguson.

Dr. GIBBS: My acquaintance with this subject is of recent date. In August of last year, I saw the first case, and quickly following that, in November, a second came into my hands. Both were fairly typical, one being a case of extra- and the other of intra-peritoneal rupture. The previous histories of the two cases, however, differed considerably. In both, the monthly period, previously regular, had been missed, and was followed two or three weeks later by severe pain, faintness, and uterine hæmorrhage.

In the extra-peritoneal case, there had been no morning sickness, and the attacks of pain and faintness had twice recurred before I saw her eight days after the first attack, when the chief complaint was intense pain in the lower part of the abdomen and the thighs. The patient was blanched and anxious, and the pouch of Douglas was occupied by a tense fluid swelling, extending above the brim of the pelvis on the right side, in which a freely-movable body could easily be felt. The cervix was softened, and there was marked pulsation to the right of the uterus. No operative interference was undertaken, and, after three months' confinement to bed, the patient recovered, with a hard body the size of a walnut occupying the pouch of Douglas, and this lump shows no signs of disappearing.

The second case was more interesting. The patient had been married three years without any sign of a family, and it was for this reason that I was first consulted. Examination revealed no structural abnormality, the only thing noticeable being an intensely acid condition of the vaginal discharge.

This was corrected, and three months later the period, previously regular, was missed. There was nausea in the mornings, and sickness on two occasions. At about six weeks from the last period, she consulted me on account of some indefinite pains in the lower part of the abdomen; the breasts were enlarged, and the areola darkened. A week later, the pain became severe, and was accompanied by some faintness, which passed off only to recur in a couple of days, and then accompanied by smart uterine hæmorrhage, which continued until after the operation. Examination showed the uterus pushed over to the left, the cervix slightly softened, the right lateral fornix occupied by a tender swelling, and marked pulsation in the vessels. The pains recurred, and the patient commenced to get blanched, the pains nearly always accompanying an action of the bowels. Dr. Mackie, who saw her with me at this time, agreed on the diagnosis of a ruptured ectopic gestation.

The surroundings not being of the best, it was decided to wait. However, three or four days later the faint-

ness and blanching rapidly increased, so I operated and removed the specimen which is now on the table. The patient made a good recovery, and was out of bed 21 days after the operation.

Observe the difference in the two cases. Both made good recoveries, but the first (without operation) was in bed three months. The second (with operation), one month (10 days before, and 20 days after the operation), and I must confess that until I heard Dr. Batchelor's paper read, I had been regretting that I had not done something to obviate the tedious recovery of the first case.

The specimen which you see is interesting apart from the ruptured tube in that the ovary contains two cysts, one the size of a hazel nut, and the other considerably smaller; and in addition there is a sessile tumour hanging on to the back of the broad ligament about the size of a small walnut. Neither of these conditions had given rise to any pelvic symptoms. The left ovary was apparently normal.

Dr. GRAHAM CAMPBELL: There are one or two points upon which I should like to remark.

First, as to morning sickness being as a rule absent in cases of extra-uterine pregnancy. In the first case I had the misfortune to see, the principal symptom was the continued vomiting, which masked other symptoms. Being a young practitioner, I called in an older medical man to give me his opinion on the subject. He salved my conscience by stating that the symptoms were due to excessive vomiting, and would disappear shortly under ordinary treatment, and the patient would recover. I was not altogether satisfied with his opinion, and called in a second man, and, consulting, we between us made the diagnosis extra-uterine pregnancy. This was some years before operation was usually performed for the relief of this condition. According to the teaching of the schools, we treated with rest and opium. I regret to say that in that case that treatment was not satisfactory. The hæmorrhage continued, and the result was fatal.

The subject of operation in the case of rupture is one in which Dr. Batchelor says we sometimes go a little too far. A great deal depends, not only upon the social condition of the patient, but also upon the locality in which she lives. In the case of a patient living at a distance, in which the diagnosis is extra-uterine pregnancy, I think it is advisable to take time by the forelock to prevent running the risk of rupture rather than to leave nature to assert itself, for the very simple reason that at any moment medical advice may be necessary, and the patient would be in the position that an operation could not be done, when perhaps it may be necessary at a moment's notice. In cases where, as it were, the patient is under your thumb, and you are prepared to relieve the patient by operation at a moment's notice, I agree with Dr. Batchelor.

[The papers forwarded by Drs. Leatham, of New Plymouth, and Dr. Moore, of Napier (see p. 155), were then read by the Secretary, Dr. Gibbs.]

Dr. CLEGHORN: We have to thank Dr. Batchelor for a valuable addition to the literature of this subject. Fourteen cases is a large experience for one man to have had in his own practice, and these have been most carefully studied by him. His remarks on the necessity or otherwise of operating are most opportune. I think all of us who have had experience of this accident must admit that there is a great tendency to recovery without surgical interference. However, as Dr. Graham Campbell points out, in cases living at a distance from surgical assistance, immediate operation is less risky than delay, because serious symptoms might arise at any time during expectant treatment which would not allow of aid being summoned from a

distance. In my own experience I have met with nine cases, of which seven lived at a greater distance than 10 miles from any medical man.

THE COLD-AIR TREATMENT OF TY-PHOID FEVER.—II.

By J. MURRAY-GIBBES, M.D., BORDER TOWN, SOUTH AUSTRALIA.

THERE are two methods by which the cold-air treatment of disease can be carried out—(1) a cold-air chamber; (2) the local application of cold.

I. *A Cold-Air Chamber*.—Mr. W. W. Crawford, of Sydney, has kindly designed for me a cold-air chamber or ward which entirely carries out the idea I had in view, and, as his diagrams and explanatory notes fully explain themselves, it is unnecessary for any remarks of mine on the subject.

EXPLANATORY NOTES TO DIAGRAMS.

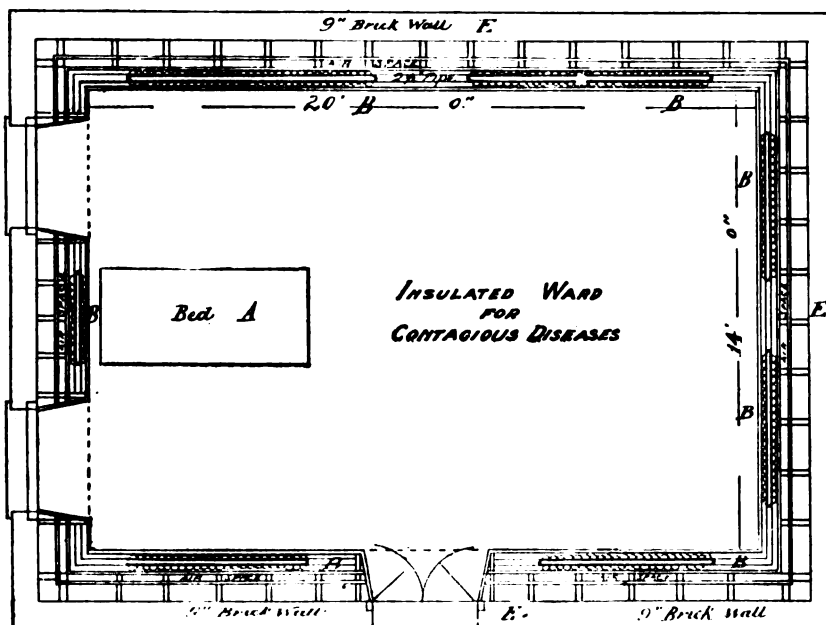
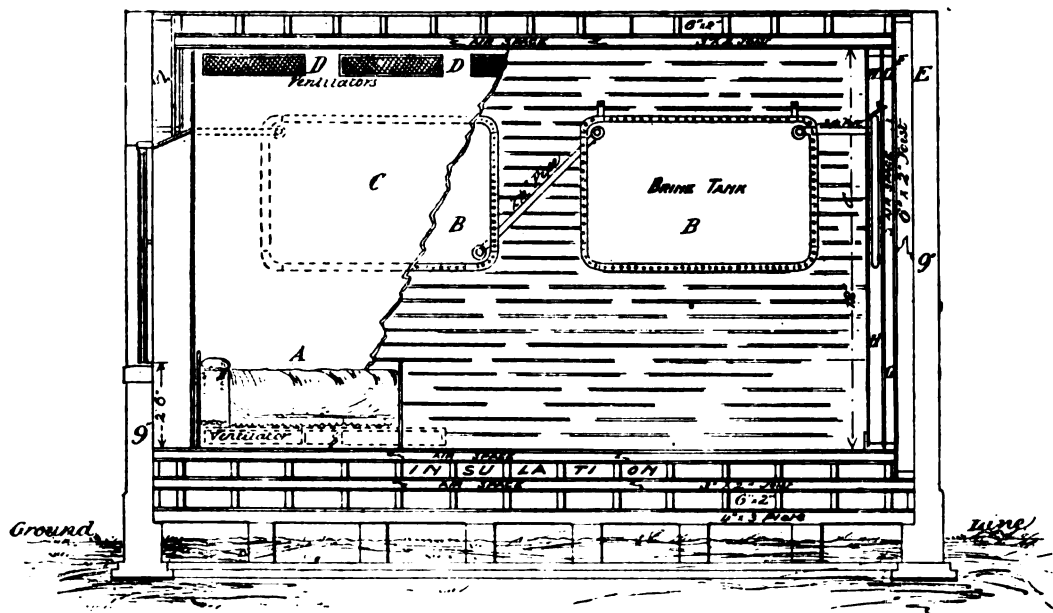
The room depicted in the accompanying drawings is an ordinary hospital ward, with the difference that in addition to the brick wall there is a 6-in. space (marked F), filled with pumice-stone as insulation, and then an air-space over that, which makes a complete insulation of dead air-space, non-conducting material, and brick wall. Inside the room, behind a false wall (marked C), are bracketed the brine tanks (B, B, B, B, B, B), hollow tanks with a space inside, one and a half inches wide. These tanks are connected up with a small freezing machine, from which brine at a low temperature, composed of chloride of calcium or chloride of magnesium, is pumped with great velocity. The flow of brine is regulated by the nurse by a simple tap in the room, and this tap is opened or closed according to the readings of the thermometer and the instructions of the doctor in charge, or an automatic thermostat can be placed in the room and set by the doctor to a certain temperature, and it will keep the room at within half a degree on either side of the temperature at which the thermostat is set. The ventilation of the room may be regulated automatically or by an electric fan. The atmosphere of the room will be very dry. My estimate for the small freezing machine and the fitting of the room is £450.

W. W. CRAWFORD.

II. The local application of cold of any temperature by means of pipes in connection with a freezing machine must prove of enormous value to the medical attendant, for, by means of a tubular mattress or pads, the whole or any part of the body can be treated. If the pipes are also connected with a hot water service, any temperature could be obtained, suitable either for collapse or high fever.

With these means the temperature of a hospital ward can be regulated during the summer and winter, and no one who can afford it need in future complain of hot rooms in private houses during a heat wave, for cool rooms can always be at their command.

I wish to return my best thanks to Mr. W. W. Crawford for the trouble he has taken and the skill and scientific knowledge he has displayed in carrying out my ideas.



HOW THE PARIS MUNICIPALITY FIGHTS TUBERCULOSIS.

BY EDWARD CONNER.

THE Municipal Council of Paris has taken up the question of tuberculosis, and, having put its hand to the plough, does not intend to look back. It agrees with Professor Grancher, that "tuberculosis is the most curable of chronic diseases"; the remedy is found and defined. It is at the school and at the domicile that the enemy will be attacked. Figures attest that the scourge afflicts more than one-third of the population of the capital, and kills off one-sixth of the inhabitants. The population of the city is 2,536,824, and the number of primary, communal, or Municipal schools, 380. Doctor Brouardel has affirmed that no epidemic in the century, not even excepting the cholera of 1832, at Paris, has surpassed in murderous results tuberculosis; it is only exceeded by the cholera in Spain, which destroyed 200,000 persons in two years. The Municipality will attack the evil at the hospital by caring for the patient, protecting the *personnel*, and aiding the affected at their own homes. These difficulties, the latter especially, are not underrated. Doctor Bertillon shows that 331,796 of the inhabitants of Paris reside in over-crowded dwellings, fatal alike to health and morality; 17,000 families of five members occupy but two rooms. But what rooms? Too frequently mere closets, devoid of light, deprived of aération, too often humid, and the natural breeding-centres of disease germs. When a family is badly lodged, the narrow, ill-ventilated apartment, is improperly kept; the afflicted can receive no suitable care, and the disease is propagated more surely if the bread-winner loses his salary, and misery enters and strikes husband and child. Even among the poor, owing to their prejudice to enter an hospital, the afflicted prefers to work on and earn a pittance to support his family. If the wife be vigorous, she can, perhaps, nurse husband and family, and gain a little money. However, that slavery must soon pull her down; hence, the not uncommon spectacle, when the husband is buried, the first to demand admission to the hospital is the widow-mother.

If not able to cure tuberculosis, let the effort be made to prevent its being produced. That will spare future generations the decimations that ours experiences. The school is a fruitful scourge of contagion; hence, instruct children about the danger that may result

from the improper habit of expectorations. In the Paris omnibuses, a police decree is posted up enjoining passengers not to expectorate in the vehicle. Let the managers of public schools, and the teachers, impress on the pupils the observance of hygienic rules. Why should not the official medical attendants be instructed to give public conferences on sanitation? Parents ought to assist in these betterments of health efforts. Further, all dispensaries, public or private, ought to be informed of any case of suspected tuberculosis among children, and urge immediate relief. A slight cough in the day-time, a little fever in the evening, some perspirations at night, ought to at once arouse the suspicion of a mother. That is the moment to call in the doctor, and to execute faithfully his instructions. It is at the commencement, at its first stage, that phthisis can be stopped; the bacillus is destroyed, and the tubercle, in place of ulcerating, becomes hard; in other words, the terrible disease is conquered. Instead, the child coughs, trots about, eschews a doctor, goes to school, and contaminates comrades. The cough still sticks, the child begins to feel weary; the cough has arrived at the racking stage, and the dreadful wheezing sound is heard. Months pass; the little afflicted has become worse, is conducted to the hospital by the mother; the physician examines, auscults, and, finally, breaks the terrible news, "Bring away your child; we cannot admit the young invalid, that would require too long a residence; later, perhaps, if not cured, come again, and we will endeavour to find a bed." But a bed on which to die. And the mother withdraws in tears; she has comprehended, but too late, the situation.

Since November, 1895, school dispensaries have been created in France; there are also several founded by private efforts, independent of those organized by the Municipalities. They are all urged to extend their good work to "prevent," as well as to cure, tuberculosis. It is recommended to serve out liberally cod liver oil and creosote, and provide for every dispensary supplies of medicaments from the Central Pharmacy, and so secure their being of first quality, and at wholesale prices. It is also strongly recommended to obtain healthy and cheap milk for the poor children. Another form of precaution is to make sure that the teachers be not themselves phthisical; their work is fatiguing, and their profession makes great demands upon their respiratory organs, exposes them to be attacked by the disease, in addition to having to come in contact with infected pupils. So great is the number of

teachers, of both sexes, of the primary schools, suffering from tuberculosis, that no candidate for the two Normal or Training Colleges of Paris will now be admitted till medically examined by the official physician; in addition, the Colleges are subjected to a severe hygienic surveillance. It is proposed that, in the case of teachers who have become tuberculosed, they should be pensioned, or admitted to a special asylum. All schools are to be frequently disinfected.

Respecting domiciliary measures, the Municipality proposes to distribute written instructions to supply spitting boxes, to disinfect premises, and to obtain supplies of disinfectants at the local sanitary offices, and the Mayoralties to inculcate the fact that tuberculosis is curable, and spreads by expectorated matters, that the spitting boxes ought to be washed out daily in hot water, and all contaminated linen scalded for at least five minutes. However, in the eyes of the poor, these are theoretical though excellent measures. The poor have no fire, often no fire-place, and those whom misery has brought low will care but little for reading instructions. The plan of Doctor Séailles is better; have "inspection-nurses" attached to the dispensaries, who will visit every second day the invalids, see that the medicaments prescribed have been taken, and the doctor's instructions followed, that hygienic measures are not neglected, while not allowing the poor to feel that they are abandoned. Control this service of "inspection-nurses"—or *infirmiers-surveillants*, as they are called in France—by means of fortnightly reports. The experiment will be tried in a quarter of the city, a slum where misery chronically exists—the seventeenth ward or *arrondissement*, which has a population of 180,000, and where the deaths from tuberculosis in 1891 amounted to 378, to 526 in 1892, and to 564 in 1893.

Docteur Brinsenstein asserts that physicians in charge of the relief dispensaries can cite cases where whole families have become extinct through tuberculosis. On one fact, all the doctors in charge of the dispensaries are agreed: that among the medicaments supplied, the most necessary is sterilised milk. The latter is to be consumed on the spot, in the dispensary even. Then the spectacle would be rarer of children indifferent at play, or in their occupations—in a pestilential *milieu*, and vowed to certain death within a not distant time. Doctor Vilderman proposes to sell to the necessitous, and the indigent, the sterilised milk at five sous the $1\frac{1}{2}$ pint, or *litre*, being a reduction of 50 per cent. on current prices, and to supply them gratuitously with an apparatus to

sterilise the milk themselves. But the poor have no fires. The Municipality is urged to accord a subsidy of 200,000 francs to a company of dairymen to supply genuine milk—and why not sterilised in advance?

The plan of Doctor Séailles is more practical. He would distribute medicated milk as a fortifying aliment, for the loss of strength and the absence of effective nutrition are the great evils to be combated. All persons who lose one-third of their weight are in imminent danger of death. "To-day," observes Doctor Séailles, "physicians have nothing to prescribe but cod liver oil and glycerine." He advocates the milk treatment, and urges one quart daily of genuine milk as a powerful recuperative adjunct. Then the next point is to see that the tuberculosed takes that quantity daily. The Doctor would prescribe one pint of medicated milk, either iodurated, glycerined, phosphated, &c., by the chemist, that would prevent the milk from being consumed by the non-invalid; he also recommends the preparation of meat powder, lentil, pea, and oaten meals. It is the progressive inanition, the wasting away, which constitutes the grave dangers that menace the diseased; hence, make sure to supply the equivalent of the loss, by furnishing medicaments in packets at the pharmacies. To cure the tuberculosed, one must nourish him; to do so, we must place at his disposal the medicaments he cannot buy, while the "inspection-nurses" would see that professional and hygienic measures were executed. The Municipal Council of Paris proposes to expend six millions of francs with which to fight the plague. It will, if necessary, strike a special tuberculosis tax; two centimes on the assessed property of the city would yield the desired sum. The Municipality could also claim a larger share of the tax levied on the bettings at the racecourses in the suburbs. Small hospitals would be erected, having 2,000 beds, to isolate patients, where all modern medical appliances would be introduced. That organization would supersede the cumbrous and disparted plans of relief now in operation, and, while presenting few dangers, would, in minimising the disease, reduce the cost of combating the insidious enemy.

PROTAGOL.—We have received from Mr. G. Arnold a sample of Bayer's Protagol (see advertising columns, page xxiv.), which is a chemical compound of Silver and a Protein substance, forming a smooth yellowish powder. It is readily soluble in hot or cold water, and its solution is not precipitated by either Albumen or Chloride of Sodium. Professor Neisser, of Breslau, considers it will prove to be more suitable in the treatment of Gonorrhoea than any other remedy at our command. It is used as an injection in the strength of $\frac{1}{4}$ per cent. to 1 per cent.

PROCEEDINGS OF BRANCHES.

NEW ZEALAND BRANCH OF THE BRITISH
MEDICAL ASSOCIATION.

REPORT OF COUNCIL FOR 1898.

In presenting the Council's second annual report, we have to congratulate the Branch on a most successful year.

There has been an increase in the membership of 73 during the past twelve months, making a total of 173 members now on the roll, with a near prospect of a further increase to 200.

In accordance with the wishes of the Branch, expressed at the last annual meeting, the Council has modified the annual subscription.

It is now £1 10s. per annum, for which the *British Medical Journal* is supplied, and there is an additional subscription of 15s. due from those wishing to take the *Australasian Medical Gazette*.

Owing to the want of uniformity in the subscription, the work of this department is considerably increased,

and the Council would like to impress on the members that they can greatly assist the general secretary by immediately notifying him of their intention to take the *Gazette* or otherwise.

The Parliamentary Committee appointed at the last annual meeting to approach the Government on the subject of the proposed amendment to the Public Health Act, reports that a satisfactory arrangement has been come to in reference to this matter.

The "Club Circular" was sent to all members of the profession practising in the colony, and 109 answers have so far been received. The subject will come up for further discussion at the present meeting.

The by-laws of the Branch, as approved by the Council in London, are now in the hands of all the members.

Circulars and sample copies of the *British Medical Journal* have been sent to those medical men on the register who are not already members of the Branch.

We have to record with regret the death of Mr. Ernest Hart, late editor of the *Journal*. Though he was not actually the founder of our great Association, yet to his genius and life work we are indebted for the building-up and welding the medical profession into the united and powerful body we now are.

Statement of Receipts and Disbursements.

	£	s.	d.		£	s.	d.
To Subscriptions—				By <i>Australasian Medical Gazette</i> —			
1 at £3 3 0	£3	3	0	165 at 15s.	123	15	0
128 at 2 2 0	268	16	0	„ <i>British Medical Journal</i> —			
20 at 1 11 6	31	10	0	101 at £1 1 0	£106	1	0
27 at 1 1 0	28	7	0	37 at 0 10 6	19	8	6
	331	16	0		125	9	6
				„ Expenses—			
				Secretary, to March, 1897	£10	14	0
				Secretary to Council ...	7	10	7
				General Secretary ...	6	19	8
				Editor	1	17	6
				Stationery	7	8	9
				Exchange	0	0	6
					34	11	0
				„ Balance at Union Bank ...	48	0	6
	£331	16	0		£331	16	0

ASSETS AND LIABILITIES.

	£	s.	d.		£	s.	d.
To Subscriptions paid in advance—				By Balance at Union Bank ...	48	0	6
7 at £2 2 0	£14	14	0				
3 at 1 1 0	3	3	0				
20 at 0 10 6	10	10	0				
	28	7	0				
„ <i>British Medical Journal</i> —							
1 at £1 1 0	£1	1	0				
3 at 0 10 6	1	11	6				
	2	12	6				
„ <i>Australasian Medical Gazette</i> —							
2 at 15s.	1	10	0				
„ Branch Funds	15	11	0				
	£48	0	6		£48	0	6

Examined and found correct.

WALTER THOMAS, }
L. S. MANNING, } Auditors.

GRAHAM CAMPBELL, General Secretary.

Christchurch, 1st January, 1898.

In the balance-sheet attached, the general secretary shows a credit to the Branch funds of £15, against which there are a few accounts since incurred. The Council would like to submit for the consideration of members the suggestion that the Council should have permanent headquarters for the transaction of ordinary business, in Wellington or Christchurch, and that it should meet as previously during the annual meeting.

The object of such a step is that there would be better representation in either of these places on account of their central situation.

Such a change would necessitate the alteration of several of the by-laws relating to the election and duties of the secretary to the Council.

So much difficulty is encountered in carrying on a Branch, the component parts of which are so widely separated, that it would be a great advantage to have this position filled by a permanent officer, not necessarily by a member of the profession.

The annual transference of books, papers, and business from section to section is bound to give rise to extra work and less efficient management, owing to ignorance of the necessary duties attached to the office.

This is a subject that requires full and careful consideration.

The Council also suggests for the consideration of members the question of appointing a permanent Parliamentary secretary.

The thanks of the Association are due to Dr. Mason, of Otaki, who has carried out the duties of this office most efficiently during the past year.

BUSINESS MEETING OF COUNCIL, WELLINGTON, N.Z., MARCH 14.

Members present:—Dr. Cleghorn (president); Dr. Fell (president-elect); Drs. Martin and Fyffe, Wellington; Drs. Symes and Campbell, Canterbury; Dr. Barnett, Otago.

Minutes of the previous meeting were read and confirmed. Letter from Dr. Townend, Christchurch. Two letters from Dr. Hacon were laid on the table.

1. Resolved that the secretary be instructed to write to Dr. Townend, and lay before him the advertisements to which attention has been drawn, and ask him whether his name has been included in these with his consent, and what steps he has taken to prevent a recurrence of the same.

2. Resolved that a sum not exceeding ten guineas be placed at the disposal of the Wellington Section for the annual meeting.

Dr. CAMPBELL made a suggestion that the work of secretary to the Council be done professionally, and that there be only one secretary, at least half of whose travelling expenses should be paid.

3. Resolved that the secretary and president be empowered to invest any funds in the Savings Bank, as found convenient from time to time.

The annual report and balance-sheet were read and adopted.

4. Resolved that all entertaining of visiting members at the annual meeting, including the annual dinner, fall upon the local section.

A suggestion was made that a permanent Parliamentary agent be appointed to watch the interests of the medical profession.

List of members elected:—T. O. Williams, Thames; B. M. Beattie, Auckland; E. H. Siedeberg, Dunedin; F. R. Kiley, Dunedin; W. B. Craig, Rarotonga; G. Craig, Rarotonga; A. G. E. Buckby, Paeroa; T. N. Wright, Waihi; R. H. Hogg, Invercargill; G. T.

Smith, Te Aroha; Gray Hassall, Wellington; G. Lapraik, Manaia; P. R. Cook, Havelock (affiliated).

The following are admitted to membership provisionally on being recommended by the respective sections:—C. B. Innes, Wanganui; J. B. Thomson, Arrowtown; J. H. L. McIntyre, Palmerston North; A. Hendry, Mataura, Otago; K. McAdam, Oamaru; H. B. Leatham, New Plymouth; A. E. A. Palmer, Featherston; W. A. Chapple, Wellington; Ernest Rawson, Wellington. A. J. Orchard, Christchurch, was elected provisionally on his application form being found.

MINUTES OF MEETING OF COUNCIL, MARCH 17, 1898.

Present:—Dr. Fell (president); Dr. Fyffe, Wellington; Dr. Mackie, Nelson; Dr. Campbell and Dr. Cleghorn, Canterbury; Dr. Mason and Dr. Barnett, Otago.

The minutes of previous meeting were read and confirmed.

CORRESPONDENCE.

Letters from Mr. H. M. Gore and Miss Harper, re clerical assistance, were received. Resolved,—“That the matter be left to Dr. Campbell (general secretary) to deal with.”

A letter was received from Dr. Hudson with respect to representing the Branch at the next meeting of the British Medical Association. Resolved,—“That in the absence of knowledge as to what business will be dealt with at the meeting of the Association, the Council cannot see its way to nominate anyone to represent it at present.”

A letter was received from Dr. Hacon relative to the necessity of State inspection of meat and milk. Resolved,—“That the Parliamentary Secretary draft a letter on this subject to be forwarded to the various Chambers of Commerce in the colony.”

SECRETARY OF COUNCIL.

Dr. CAMPBELL thought it advisable that notice of motion should be given to alter the by-laws of the Branch with a view to doing away with the office of Secretary to the Council. He thought the work should be done by the General Secretary, who should be granted clerical assistance, as the work had become too onerous for any practitioner to do. If, as under the present system, they transferred the work from one section to another, it was bound to get behindhand and to be inefficiently done. The holder of the office might be very willing to do the work, but not having complete knowledge of the business to be transacted, he was bound to omit to perform duties which were very necessary in the interests of the Branch. They were part of a corporate body, and had to conform with the articles of association of the British Medical Association, and under these circumstances there were certain things to be observed that could not be neglected, and if they transferred the work to a man who did not understand these matters their business was bound to get in a bad state. He would also suggest that the ordinary Council meetings should be held in a central position, such as Wellington or Christchurch. These centres would tap larger districts than other portions of the colony. Auckland could only tap Auckland itself, and it was unreasonable to expect members from Wellington and Dunedin to attend at ordinary meetings there. Napier also was a small district, possessing only fourteen or fifteen members, and it was not to be expected that representatives would be sent there. The same remark would apply to Nelson. In the case of Dunedin, that place also was to some extent isolated, and consequently he thought the choice lay between Christchurch and Wellington for the headquarters of

the Branch. On the whole he thought Wellington was the more suitable place on account of it being the seat of Government, and where they were more in touch with medical matters likely to engage the attention of Parliament. In addition, he thought they could get a better representation in Wellington than could be obtained in any other centre. This, however, was a question that had to go before all the Sections for consideration, and he hoped it would be understood that they did not wish to make this change, as Dr. Cleghorn had pointed out in the report of the Council, for any personal benefit at all, but for the benefit of the Branch. They wanted to keep the Branch alive, and not to be extinguished, as he was afraid it would be if any other action were taken in the matter. He would like to hear an expression of opinion from other members of the Council.

Dr. Fyffe, as Secretary of the Council, had only to repeat what he had said at the general meeting, viz., that the work had increased very largely, and involved a large amount of routine business, such, for instance, as addressing two and three hundred envelopes and many letters. This occurred two or three times during the year, and in addition there was a good deal of general correspondence and ordinary clerical work to be done which it was too much to expect any man with any practice at all to do. It was necessary that the Council should be afforded some relief, and the proposal made by Dr. Campbell seemed to be a very feasible one.

Dr. MASON said that after hearing the remarks that had been made he quite agreed that the Council should meet in Wellington, and also that a permanent secretary should be appointed, with the assistance indicated. He therefore gave notice of motion for next meeting to that effect.

Dr. CLEGHORN said he felt that Dr. Campbell had a more intimate knowledge of the by-laws and constitution of the Association than any other member, and any suggestion Dr. Campbell brought forward always carried great weight. That gentleman's experience in building up the Association had taught him what the requirements of the Branch were, and when he was looking into the by-laws he hoped he would see what alterations were necessary to be introduced for the appointment of a Parliamentary Secretary. He (Dr. Cleghorn) did not think any committee could do nearly so well as Dr. Campbell, and he proposed to leave the whole matter in Dr. Campbell's hands in order that that gentleman might bring up the proposed alterations at the next Council meeting. There were many things which might suggest themselves to Dr. Campbell's mind which the Council might overlook at the present time.

Dr. CAMPBELL said he had anticipated that certain alterations would be necessary in the by-laws, and therefore had had a page left blank in order that these alterations might be pasted in at some future time.

Dr. MACKIE said the advantage of holding the Council meetings in Wellington were to his mind obvious. Wellington was more central and more accessible than any of the other centres. Christchurch was accessible to Dunedin, but not to Auckland and Napier. Wellington was more accessible to Nelson, Napier, and Auckland than Christchurch could possibly be, and another advantage it had was that it contributed a larger proportion of members to the Association.

PARLIAMENTARY REPRESENTATIVE.

Dr. CAMPBELL said that in view of the alterations in the by-laws he thought the Council would be justified in asking Dr. Mason to act *ex officio* until he was able to take a seat on the Council.

Resolved,—“That Dr. Mason be asked to act as Parliamentary agent.”

NEW MEMBER.

On the motion of Dr. CAMPBELL, Dr. Johnston, of Carterton, was elected member of the Branch provisionally on being elected by the Section.

DATE OF NEXT MEETING.

On the motion of Dr. CAMPBELL, it was decided to ask the Auckland Section whether it would be convenient for them to hold the annual meeting in the last week of December or the first week in January.

HONORARY MEMBERS.

Dr. CAMPBELL mentioned that by the articles of association of the British Medical Association they were permitted to elect as honorary members people of scientific attainments, and he suggested, acting under the by-laws, that Sir James Hector, Dr. MacGregor, and Mr. J. A. Gilruth (Government Bacteriologist) members of the Branch.

Resolved,—“That Sir James Hector, Dr. MacGregor, and Mr. Gilruth be honorary members of the Branch.”

SERUM FOR THERAPEUTICS, AND BACTERIOLOGICAL ESTABLISHMENT.

Resolved,—“That the subject of a bacteriological establishment, and also the provision by the Government of serum for therapeutics, be left to Dr. Mason to report on at the next meeting of the Council.” The question of vaccine was also left to Dr. Mason to deal with.

PRESIDENT-ELECT.

Resolved,—“That Dr. W. G. Scott, of Onehunga, nominated by the Auckland Section, be President-elect for the coming year.”

This concluded the business.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE Annual Meeting was held at the Royal Society's Room, on Friday, 25th March, 1898. Present: Dr. C. P. B. Clubbe (President, in the chair), Drs. Knaggs, J. A. Dick, Fiaschi, F. H. Quaife, Clarence Read, Hankins, Dowdell, Pockley, W. Chisholm, Todd, Gordon MacLeod, Faithfull, Litchfield, West, Walker-Smith, Worrall, Bennet, Tidswell, Scot Skirving, Maitland, Abbott, G. Armstrong, Eichler, Barrington, S. H. Hughes, Collins, Mullins, F. W. Hall, Morgan Martin, McMurray, P. M. Wood, W. T. Chenhall, G. R. P. Hall, Gladden, Isbister, Rennie, Crago.

The minutes of the previous meeting were read and confirmed.

The President announced the election of the following gentlemen as members:—Drs. Meredith, Paget, Liddell, Watson, Cruise, Cobb, W. G. Armstrong, Higgins.

The Hon. Secretary (Dr. G. E. RENNIE) read the Council's Report. (See page 166.)

The Hon. Treasurer (Dr. CRAGO) read the Financial Statements of the Branch and *Gazette Funda*. (See opposite page.)

Proposed by Dr. CRAGO, seconded by Dr. HANKINS:—“That the Report of the Council and the Treasurer's Statements be adopted. Carried.

The President (Dr. C. P. B. CLUBBE) read his address. (See page 139.)

Dr. HANKINS proposed a vote of thanks to Dr. Clubbe for his able address, and said the subjects chosen were of the utmost interest to the members of the profession. The question of the charges of medical men was one of importance; there could be no doubt that the fee of 10s. 6d. was too much to expect from a working man. The younger men of the profession have an idea that if they were to reduce their fees they would be accused of underselling; it should, therefore, be understood that the fees for the class of patients mentioned should be lowered

THE HON. TREASURER IN ACCOUNT WITH THE NEW SOUTH WALES BRANCH OF THE
BRITISH MEDICAL ASSOCIATION.

STATEMENT OF RECEIPTS AND EXPENDITURE FOR THE YEAR 1897.

1897.	<u>Dn.</u>	£	s.	d.		<u>Cr.</u>	£	s.	d.
Jan. 1—To Balance from 1896		103	7	10	By Parent Association for B. M. J.		372	19	9
" Subscriptions Received		719	7	6	" Cost of Draft			3	2
" Refund from Profession for Printing			8	7	" A. M. Gazette		265	10	0
" Amount added for Exchange .. .		1	0	0	" Rent (Royal Society)		8	0	0
" Interest Received		8	3	1	" Printing (Pepperday and Co.)		9	15	6
					" Library— Periodicals	\$6	1	0	
					Bookbinding	3	16	6	
									9
					" Stamped Receipts		3	6	8
					" Assistant Secretary (Honorarium) ...		50	0	0
					" " " " (for Postages, &c.)		11	0	11
					" Petty Cash Account		8	17	9
					" Credit Balance		97	15	7
									\$840
		\$840	5	11			\$840	5	11

Audited and found Correct.

A. JARVIE HOOD, } Auditors.
ROBERT H. TODD, }

W. H. CRAGO,
Hon. Treasurer.

11th February, 1898.

GAZETTE ACCOUNT.

STATEMENT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING DECEMBER 31ST, 1897.

1897.	Dr.	£	s.	d.	Cr.	£	s.	d.
Jan. 1—To Cr. Balance Forward ...		89	9	9	By John Sands (printing <i>A.M.G.</i>) ...	767	2	5
Jan.-Dec.—To Receipts, Subscriptions ...		788	6	6	" Mr. Bruck, Balance of Purchase Money ...	350	0	0
" " Advertisements ...		581	16	4	" Petty Cash (see particulars) ...	147	0	0
" " for Illustrations... ..		12	18	6	" Bent and Gas	43	1	3
" " for Reprints 		5	12	10	" Canvasser's Commission	7	15	0
" Refund from Mr. Bruck		10	10	0	" A. Hordern and Sons (Furniture) ...	15	15	0
" Interest Received		1	3	4	" Lassetter and Co. (Incandescent Lights)	3	5	0
					" J. E. Bateman (Colouring Walls) ...	2	6	6
					" Telephone	6	15	8
					" <i>Gazette</i> Fund (Amount Returned) ...	10	0	0
					" Refund (Dr. Ludlow)	0	10	0
					" Interest Charged by Bank	0	2	6
					" Credit Balance	135	18	11
		<u>£1,489</u>	<u>12</u>	<u>3</u>		<u>£1,489</u>	<u>12</u>	<u>3</u>

PARTICULARS OF GAZETTE PETTY CASH ACCOUNT.

1897.	Dr.	£	s.	d.	1897.	Cr.	£	s.	d.
Jan. 1.—To Cr. Balance forward ...		3	3	10	Jan.-Dec.—By Stamps...		59	16	7
Jan.-Dec.—To Cheques ...		147	0	0	„ Mr. Grigson ...		52	0	0
					„ „ (special) ...		5	0	0
					„ <i>Herald and Telegraph</i> ...		2	14	6
					„ Delivering <i>A.M.G.</i> ...		3	17	6
					„ Fisher & Lingham (Paper, &c.) ...		3	0	6
					„ Cleaning Offices & Windows ...		8	3	6
					„ Numbering Machine... ..		3	0	0
					„ Jubilee Illuminations ...		3	0	0
					„ Solicitor, <i>re</i> Advertising A/cs. ...		2	2	0
					„ Exchange on Cheques ...		3	2	1
					„ Sundries ...		3	5	9
					„ Balance in Hand ...		1	1	5
		£150	3	10			£150	3	10

Jan. 1, 1898.

Examined and found Correct.

**A. JARVIE HOOD, } Auditors.
ROBERT H. TODD, }**

W. H. CRAGO,
Hon. Treasurer.

11th February, 1898.

It would be useful for the junior member of the profession to know that the general opinion was in favor of the reduction of fees in certain cases. He (Dr. Hankins) had very much pleasure in moving the resolution.

Dr. F. H. QUAIFFE, in seconding the resolution, said he would like to see the fees reduced in certain cases, and had frequently felt a great difficulty in the matter, but disapproved of an all-round reduction to working men. He thought the servant girl had more difficulty in paying the fees. He thought there was a good deal of mummery about the way the Health Act was being carried out at present. In the Woollahra Council, in which he (Dr. Quaife) had the honor of a seat, the Act was brought into operation after consultation with the health authorities, and some of the provisions were found to be unsuitable.

Dr. W. CHISHOLM, the President-elect, then put the resolution to the meeting, and it was carried by acclamation.

Dr. CLUBBE said he was obliged for the vote of thanks. The President was in a peculiar position when delivering his address. He was like a parson; whatever he said was not open for discussion. This might have its advantages and its disadvantages, as many of the subjects touched upon were worthy of consideration and discussion. The work of the Council during the year had been well done. No doubt there were sins of omission and commission, but it must be remembered that the Council was an elective body, and if it did wrong during its year of office the members had the remedy in their own hands when electing the new Council for the ensuing year. The Council worked harmoniously previously, and, he hoped, would continue to do so.

Dr. RENNIE proposed and Dr. Knaggs seconded the following resolution:—"That a letter of condolence be forwarded to Mrs. Ernest Hart." Carried.

The President announced the result of the elections for Officers and Council for the ensuing year:—President, Dr. W. Chisholm; Vice-President, Dr. E. T. Thring; Councillors, Drs. Crago, Clubbe, Coutie, Clark, Fiaschi, Foreman, Jenkins, Knaggs, MacCormick, Quaife, Rennie, Worrall; Auditors, Drs. Hankins and Todd.

ANNUAL REPORT FOR THE YEAR 1897.

In presenting the Report for the year ending 31st December, 1897, the Council take the opportunity of congratulating the members on the general progress of the Branch during the year just concluded.

There are now 371 members on the roll as against 347 in the previous year. Thirty-seven new members were elected, and twelve resignations received. One death occurred during the year (Dr. A. Miers). These figures show a nett increase of twenty-four members.

There have been ten general meetings held, and the attendance of members has been fully sustained. Twenty-one papers were read on various subjects of general interest to the profession, and twenty-one exhibits were shown and explained by the members.

The difficulty which arose with the Home Association, owing to the incorporation of the Branch, has now been satisfactorily settled, and the most cordial relations exist between the parent Association and the Branch.

A vote of the members was taken on the question of meeting in consultation medical men who are ineligible for membership of the Branch, with the result that it was decided that it was undesirable to do so.

Drs. Worrall, Crago, and Knaggs continue to act as

a sub-committee for the management of the *Australasian Medical Gazette*. To these gentlemen the very best thanks of the members are due for the satisfactory manner in which the business of the *Gazette* is carried on.

The Hon. Treasurer's statement shows a credit balance of £97 15s. 7d. to commence the new year with. The total receipts from all sources amounted to £736 18s. 1d., and the expenditure £742 10s. 4d. There are a number of subscriptions still outstanding, amounting to £25 4s.

There were thirteen Council meetings held during the year. Appended is a list of the attendances of the members of Council.

C. P. B. CLUBBE, President.

GEORGE E. RENNIE, Hon. Secretary.

EXHIBITS.

Dr. Pope.—Patient upon whom he had operated for high degree of myopia.

Dr. Pope.—Six patients upon whom he had operated for cataract, without iridectomy.

Dr. W. F. Quaife.—Drawings illustrative of a case of chondritis tuberosa.

Dr. Sydney Jamieson.—Specimens—congenital heart disease.

Dr. Worrall.—Specimens—(1) unruptured tubal pregnancy; (2) ruptured tubal pregnancy.

Dr. Worrall.—Six pathological specimens.

Dr. McAllister.—Specimens—urinary calculi.

Dr. Bennet.—Patient suffering from psoriasis.

Dr. Bennet.—Patient suffering from Paget's disease of the nipple; case of elephantiasis.

Dr. Rennie.—Patient suffering from athetosis.

Dr. Hogg.—Tumour of the brain.

Dr. Macdonald Gill.—Brain of a micro-cephalic idiot.

Dr. Neill.—Patient suffering from delayed descending testicle and congenital hernia.

Dr. Scot Skirving.—Patient upon whom he had performed gastrotomy.

Dr. Clubbe.—Six cases of talipes.

Dr. MacCormick.—Patient upon whom he had operated for cancer of the mouth.

Dr. Gordon MacLeod.—Ulcer of the ocular conjunctiva in a patient 74 years old which had some unusual characteristics.

Dr. Maitland.—Patient upon whom he had performed a plastic operation for the restoration of the nose.

Dr. Sawkins.—Specimen—double cystic kidney.

Dr. Litchfield.—Specimen—cystic kidney from a child 8½ months old.

PAPERS READ BEFORE THE BRANCH DURING 1897.

Dr. Odillo Maher.—Notes on a Case of Cicatricial Entropion.

Dr. W. F. Quaife.—Notes on a Case of Chondritis Tuberosa and Allied Troubles in Speakers.

Dr. MacSwinney.—Notes on a Case of Barlow's Disease.

Dr. Barrington.—Impressions of a Year's Gynaecology in Germany.

Dr. Worrall.—Notes on Ectopic Gestation Twice within Seven Months in the Same Patient.

Dr. P. T. Thane.—Notes on a Fatal Case of Intractable Vomiting.

Dr. Hinder.—Pseudo-Ileus and Intestinal Obstruction.

Dr. McAllister.—Six Consecutive Cases of Urinary Calculi.

Dr. Thring.—Notes on 50 Cases of Abdominal Section.

Dr. Rennie.—Notes on a Case of Athetosis.

Dr. Pope.—Extraction of Cataract without Iridectomy.

Dr. Crago.—Notes on a Case of Umbilical Hernia.

- Dr. T. J. Henry.—Notes on a Case of Puerperal Infection Treated with Injections of Antistreptococcus Serum.
- Dr. Hankins.—Notes on a Case of Pylorectomy.
- Dr. Pope.—Notes on Two Cases of Removal of the Transparent Lens for High Myopia.
- Dr. Fiaschi.—Notes on a Case of Fracture and Dislocation of the Pubic Portion of the Pelvic Ring, with Penetration into the Bladder of a Bone Fragment. (Patient was exhibited.)
- Dr. Sydney Jamieson.—Notes on a Case of Congenital Heart Disease.
- Dr. Scot Skirving.—Clinical Notes on Enteric Fever as Observed at Prince Alfred Hospital.
- Dr. Fiaschi.—Intra-Peritoneal Operation for Abdominal Hydatid according to Russell's Method, with Notes of Five Cases.
- Dr. Litchfield.—Notes on Slow Pulse after Diphtheria with a Case of Very Slow Pulse.

ATTENDANCE OF COUNCILLORS AT COUNCIL MEETINGS.

Thirteen meetings were held during the year:—

Dr. Clubbe	...	attended 13 meetings
Dr. Rennie	...	" 13 "
Dr. W. Chisholm	...	" 12 "
Dr. Crago	...	" 12 "
Dr. Worrall	...	" 11 "
Dr. Thring	...	" 10 "
Dr. Knaggs	...	" 10 "
Dr. Quaife	...	" 10 "
Dr. Fiaschi	...	" 9 "
Dr. Coutie	...	" 9 "
Dr. MacSwiney	...	" 9 "
Dr. Scot Skirving	...	" 8 "
Dr. Newmarch	...	" 5 "
Dr. Sydney Jones	...	" 5 "

TO THE COUNCIL OF THE N.S.W. BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

The *Gazette* Sub-Committee has the honour to report that during the year 1897 the affairs of the *A. M. Gazette* have progressed satisfactorily. The circulation of the *Gazette* materially increased in consequence of the amalgamation of the *New Zealand Medical Journal* with it and the making of the *A. M. Gazette* the official organ of the New Zealand Branch. The revenue for the year amounted to £1,400, being £560 over the amount received during 1896. The ordinary expenditure was a little below £1,000. This great increase in the receipts was chiefly due to the fact that the business had become more established, so that a full year's revenue was received; while in the previous year, in practically starting a new business, only about nine months' earnings were received. The revenue for 1898 is not likely to reach within £200 of that for 1897, as a considerable falling-off has taken place in the advertising columns, the large number of new advertising contracts entered into locally in 1896 having expired, and the majority of them have not been renewed. The contracts received through our London agents are well maintained. With your sanction, all the outstanding promissory notes due to Mr. Bruck on the purchase account, amounting to £250, in addition to £100 that had been met during the year, were retired in December, Mr. Bruck refunding £10 10s. in consideration thereof. On December 31st, the funds in hand amounted to £137, and the amount owing to the *Gazette* to £290 10s., making a total of £427 10s. The total amount of liabilities at the same date being £252 10s., showing a surplus of assets over liabilities of £175.

SAMUEL T. KNAGGS }
RALPH WORRELL } *Gazette* Sub-Committee.
W. H. CRAGO }

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting was held in the rooms, Austral Building, on Wednesday, March 30th, at 8 p.m. Present: The President (Dr. McAdam) in the chair, and Drs. A. V. Anderson, Kent-Hughes, Lawrence, Harricks, Springthorpe, Hamilton, Janet Grieg, Gertrude Halley, Buchanan, Colquhoun, Hutton, Perry, E. A. Officer, D. McM. Officer, Sutherland, Scott, Palmer, Kenny, Cuscaden, Martell, Black, J. R. M. Thomson, and Henry.

The minutes of the last meeting were confirmed.

The President welcomed the first lady members, Drs. Grieg and Halley.

EXHIBITS.

1. Dr. NIHILL showed a case of unilateral exophthalmos in a patient with exophthalmic goitre, and without any apparent unilateral swelling of the thyroid. She had other typical symptoms.

2. Dr. KENT-HUGHES showed a case of talipes dorsalis. A similar case had been described in the *B. M. J.*, December, 1893, as talipes calcaneus, and by himself at the N. Z. Congress, in 1896, as talipes spasticus.

3. Dr. SPRINGTHORPE showed one of Salmon, Ody & Co's patent trusses with ball and socket joint, that under all conditions, even bathing, had given great satisfaction.

The PRESIDENT remarked that since the last meeting of this Branch, the parent Association had lost the great and invaluable services of the Editor of its journal, Mr. Ernest Hart.

Upon the motion of Dr. HARRICKS, seconded by Dr. HAMILTON, a letter of condolence was directed to be sent to his widow on behalf of the Branch.

PAPERS.

The following papers were then read:—"Notes on Typhoid and the Widal Reaction," by Dr. Springthorpe; "The Diagnostic Signs of Typhoid," by Dr. A. V. Anderson; "The Widal Reaction at the Children's Hospital," by Dr. D. McM. Officer, which papers will appear in a future issue.

The PRESIDENT considered the papers opportune and valuable. Dust must certainly take a prominent part in disseminating typhoid. The systemic exhaustion produced by the extreme and prolonged heat also had greatly increased the vulnerability. In the country, the scanty and exposed water supply would account for many epidemics. He had seen a number of cases that had followed free drinking from the Yan Yean. Surely we should now have periodic bacteriological examinations. As regards clinical differences, some at least might be accounted for by differences in resisting power in different individuals and organs. Wunderlich's typical rise did not always occur, but was very suggestive when found. Dr. Officer's results showed the value of a public bacteriologist at the service of the general practitioner.

Dr. NIHILL, whilst in temporary charge of wards in the Melbourne Hospital, had noted the virulence of many cases, and the frequent onset with pneumonia. Bradycardia during and after the attack was also a useful diagnostic sign. The Widal test might settle the vexed question—was typhoid rare or common amongst children?

Dr. HARRICKS rose to emphasize the danger of typhoid in our milk supply. His observations had horrified him. The Branch should take up the matter of dairy inspection.

Dr. THOMSON pointed out that any practitioner could have the Widal test carried out without fee on

sending a sample of blood to the University. As a Health Officer who has to deal with dépôts for night-soil, he would be glad if some examination were made of soil so used. Recent experience seemed to show that Poore was wrong in stating that burial in humus destroyed the germs.

Dr. LAWRENCE said that the toxins of certain diseases, such as diphtheria and tuberculosis, were excreted in the sweat. Did the same apply to typhoid? Should sweating not be encouraged?

In reply, Dr. SPRINGTHORPE, after thanking members, suggested to add to the other signs valuable in doubtful cases retention of urine, a rhonchus in the chest, and slow pulse if not due to cardiac medication. There certainly was no reason now why bacteriological examination of our unfiltered and contaminated water supply should not be made regularly, and the Branch might well bring the matter under official notice. He regarded typhoid as relatively rare in children, because, for one reason, their frequent evacuations prevented the lodgment of the germs. Under our conditions, it was generally impossible to be certain of the means of infection in any given case. The action of the authorities in refusing to allow typhoid to be treated in private hospitals was both cruel and unjustifiable. It seemed settled that the typhoid germ could live and propagate in soil under favorable circumstances. The sweat might contain antitoxin as well as poison. Free elimination was of undoubted value, scarcely inferior to aliment, and the latest scientists were only carrying out old Isaac Lettsom's advice—

When folks are sick and comes to I,
I purges, bleeds, and sweats 'em;
If after that they choose to die,
What's that to I—I Lettsom.

Dr. ANDERSON agreed that the Widal test had relegated all others to a back seat, and now tried all his cases by it. Some cases, if not due to other organisms, certainly were cases of mixed infection, and the spleens free from typhoid germs. He had seen at least 30 such cases. The supposed variations from Wunderlich's rise might be due to mistakes in deciding when the disease really began.

Dr. OFFICER reminded members how the typical temperature course was also altered by complications. He had found foetal blood to react where the mother was typhoidal. One other kindred bacillus, at least, that of the small intestine, seemed to react like the typhoid. One of the youngest of his cases with reaction was 20 months old. In addition to the other means of infection, he thought uncooked vegetables and bad fruit should be remembered as specially liable to typhoid infection. The meeting then adjourned.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY, LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrsman, B. Bohrsman, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Forbes (Ashfield), Taylor (Woollahra), Scott (Balmain), Anderson (Petersham), Patrick (Marrickville), R. H. Collins (North Sydney), Hanson (Waverley). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Davenport (North Sydney), Brereton (Marrickville), Ward (Waverley).

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE monthly meeting of the above Branch was held at the Adelaide University, on March 31st, 1898. Present: The President (Dr. Giles), Drs. Swift, Lendon, Michie, Morgan, Evans, Harrold, Way, A. E. Wigg, J. A. G. Hamilton, Hone, Gunson, Perks, T. K. Hamilton, J. C. Verco, Fischer, Poulton, Marten, Professor Watson and Hon. Sec. (Dr. W. T. Hayward).

LIVING EXHIBITS.

Dr. T. K. HAMILTON exhibited the following:—

I. *A Case of Plastic Conjunctivitis*.—A child, aged 18 months, came under treatment on March 28th, with a history of having had ophthalmia of five days' standing, and the right eye had become very much swollen during the last 48 hours. On examination, the condition of this latter was found to be as follows:—Great swelling of the lids, the whole of the palpebral conjunctiva covered with a greyish-white membrane, which was smooth, firmly-adherent, and resembled the condition seen after a burn from slaked lime or mineral acids; the swelling of the lids, along with a gutta percha-like toughness of the infiltration, rendered them so hard, stiff, and brawny, that an anæsthetic had to be used to allow of the inspection of the cornea; the ocular conjunctiva also had some exudation on its surface, but not so dense in structure as that on the lids, and the cornea was slightly hazy. The left eye presented the appearances of an uncomplicated purulent conjunctivitis.

The child had not had any illness of any kind, and had been fairly healthy and well up to the time the eyes became affected. There was no sign of membrane on any of the other mucous surfaces, nor had the patient been exposed to diphtheritic infection. A cultivation of the exudation was made by Dr. Morgan in the Bacteriological Laboratory, Children's Hospital, with a view of deciding whether anti-toxin should be used or not, and he reported that it contained staphylococci and diplococci (not gonococci), but no diphtheritic bacilli.

On the strength of this report, Tweedy's Quinine treatment was commenced, and the case is now progressing favourably. The blennorrhœic stage has well set in, the exudation is becoming thinner and melting away, the induration subsiding, and the cornea is still safe. The case is interesting as showing the importance of bacteriological examination in order to make a correct diagnosis. Some short time ago—before examination of membranous exudations became a part of the routine practice in our clinics—a condition such as this would most certainly have been treated as one of diphtheritic conjunctivitis, inasmuch as the eye presented all the typical clinical appearances which we have always been accustomed to associate with this latter disease. Now, with the aid of bacteriology, we can differentiate between the various forms of plastic conjunctivitis, and between the diphtheritic and pseudo-diphtheritic varieties of the same.

II. *Ulceration of the Pharynx in Hereditary Syphilis*.—M. H., aged 13 years, was brought to me for advice on the 12th of October last, complaining of a sore throat, which she had suffered from for the past 18 months; and with a history of suppuration of the right lachrymal sac having commenced only a few days ago. On examination of the throat, there was found deep ulceration of the whole of the soft palate and velum, with old scars and commencing adhesions to the posterior wall on the left side; the naso-pharyngeal opening was a good deal contracted, but a rhinoscopic image was still obtainable, and ulceration of the posterior free margins of the septum was discovered. The

margins of the nostrils were excoriated by a discharge from the interior of the nose on each side; there was some superficial ulceration of both sides of the septum, anteriorly, and, finally, a large abscess of the right lachrymal sac was found, opened, and drained.

The girl seemed fairly well grown and well nourished. There were no scars to be seen anywhere about the face. The eyes were perfectly healthy, also the ears; and the teeth, with the exception of a line of atrophy and apparent loss of enamel along the opposing surfaces of the two central incisors in each jaw, were healthy and well-shaped. Inquiry into the family history revealed no trace of syphilis on either the father's or mother's side. The mother has been dead for some years, and in her case there was a probable history of one miscarriage subsequent to the birth of the patient. There were three children in all; one died when five years old of meningitis, the other surviving sister is healthy. The patient was born at the full time; was a small, but apparently healthy child up to the time this throat trouble came on, and had had no illness of any kind previous to its onset. Iodide of Potassium was administered internally, and sublimated Calomel applied to the throat and nose daily. The ulceration of the throat healed rapidly under this treatment, but the inevitable contraction and puckering has gone on to such an extent that only a very small opening now exists into the naso-pharyngeal cavity. The lachrymal abscess is still discharging through a fistulous opening, and a large piece of bare bone is to be felt along the outer wall of the nostril on this side, involving that portion of the same where the lachrymal duct empties itself into the nose. The grounds for concluding that the conditions just described depends upon hereditary syphilis for their origin are the following:—(1) The nature and position of the ulceration in the throat. The ulceration was of the usual deep variety found in tertiary syphilis, and it was followed by the typical scarring and puckering. It occurred, likewise, in one of the favorite situations for such ulcerations, as it involved the soft palate and velum, and thence invaded the naso-pharynx and posterior nares. (2) The co-existence of bone necrosis with the ulceration. One of the peculiarities of these ulcerations is their special tendency to attack the bone and eventuate in death of the same. In fact, in these several respects, the ravages of the disease presented the typical appearances which are found in the tertiary syphilis of the adult. (3) The age of the patient. The manifestations of hereditary syphilis may occasionally be delayed until adult life, but in the vast majority of cases they occur before puberty, and the records of many cases, such as this one now before us, go to prove that these tertiary developments generally show themselves in very early life, and usually without the appearance of the familiar eye and ear, or secondary symptoms of congenital syphilis. (4) Lastly, the rapid improvement in the ulceration which followed the exhibition of Iodide of Potassium. The child had been under treatment off and on for 18 months previous to the time the Iodide was commenced, and had not been getting better, but as soon as the Iodide was given an almost daily improvement became apparent.

So much for the diagnosis and progress of the case up to the present; but its future management and the successful treatment of two such obstinate conditions as syphilitic adhesions of the soft palate to the pharynx and of lachrymal fistula depending on necrosis of the bony canal through which the lachrymal duct passes, is rather a formidable task to have to undertake.

Dr. SWIFT showed a boy upon whom he had operated for the removal of a large naevus, involving the cheek and upper lip. He had had to divide the upper lip and also incise the cheek from the angle of the mouth. He

had divided the lip, not by a single vertical incision, but by a slanting cut through the mucous membrane of the lip and then a vertical incision. Both wounds healed by first intention, and the line of the lip was perfect, there being no gutter. The chief difficulty was experienced in dissecting the mucous membrane from the naevus, which bulged considerably below the lip. The hæmorrhage was not very severe. The skin was button-holed in one spot, where there is now some puckering. This was unavoidable, as the naevus involved the skin at this point.

Dr. SWIFT also showed a girl, *æt.* seven years, who was suffering from onychia, or, as it is called, eczema of the nails of fingers and toes. He had tried several remedies without success, but was now using Thyroid Tabloids, Arsenic in small doses, and keeping the nails lubricated with Lanoline. There was a very decided improvement. He had brought the child up that evening that members might see the condition, as he thought it a sufficiently rare one in a patient of her age. If the treatment were successful he would exhibit her again.

Dr. A. E. WIGG showed two cases of compound depressed fracture of the skull operated upon successfully. Also a portion of bowel from a case of congenital absence of the rectum, in which inguinal colotomy had been performed for relief of obstruction. Also portion of lung with a tooth impacted in a bronchus, the result of an accident during dental operation.

PATHOLOGICAL SPECIMENS.

Prof. Watson showed:

1. Breast removed by Dr. Marten for cancer, following Paget's disease of the nipple.

2. (a) Large parovarian cyst of right side, with twisted pedicle. Removed by Dr. Way from a woman *æt.* 50. He had seen an exactly similar case recently in the practice of Dr. Dunbar Hooper. In that case also the symptoms were acute, and the tumour developed on the right side. The pedicle consists of the tube and ovarian ligament extravasated with blood, and twisted round to the left (that is, in the direction opposite to that of an ordinary cork-screw).

(b) Myxo-chondro-sarcoma removed from the left parotid of the same patient a fortnight after the ovariectomy. Slight paresis of the facial muscles persisted for several days.

3. Large multilocular ovarian cyst, removed by Dr. Way from a woman, *æt.* 45, who had previously been tapped by her medical attendant. On opening the abdomen a large quantity of slimy ovarian fluid was found to have escaped into the peritoneal cavity. No visible signs of peritonitis were found at the operation. Patient died on the third day of intestinal paralysis, with rapid meteorism.

4. *Bi-lateral ovarian cyst*, removed by Dr. Way from a virgin, *æst.* 23. The right ovary is remarkable, because it is composed both of a dermoid cyst and an ordinary multilocular or glandular cystoma. The left ovary is the seat of a pure dermoid containing hair and sebaceous matter.

5. *Glandular carcinoma of uterus (cervix)* (vaginal hysterectomy by Dr. Way) from a married woman, *æst.* 40. Ablation of cervix, as advised by Segond; median section of anterior wall of uterus, as recommended by Doyen. In placing the deep clamps on the top of the broad ligament Trendelenburg's position and an electric head-light were found of advantage in avoiding injury to the intestines. The resulting scar (7 weeks afterwards) at the top of the vagina is crescentic forwards, with a deep dimple at each end (*i.e.*, in the position previously occupied by the clamps in the lateral fornices).

6. *Vascular tumour of bladder*, removed by Dr. Way from a woman, *æ*t. 28, who suffered from persistent hæmaturia. A finger having been passed into the bladder, per urethram, to locate and steady the tumour, the vagina was incised, and a melon-sliced portion of the bladder wall carrying the growth was excised.

7. *Myoma of ovarian ligament* (Dr. Way).—Miss B., *æ*t. 58. Firm white tumour like a flattened Swedish turnip; it pushed the uterus forward and to the left. Diagnosed as a solid impacted ovarian tumour. It was cut out with the right tube and ovary between two ligatures on the ovarian vessels; the resulting cut edges of the broad ligament were top-sewn with a continuous suture.

8. *Myoma of Uterus* (Dr. Way).—Mrs. M., *æ*t. 57, one child 23 years ago. Sent to Dr. Way by Dr. Moule, of Glenelg. The tumour is shaped like an elongated egg, its weight 4½ lbs. It commenced its career in the right side of upper part of cervix, and pushed between the layers of the right broad ligament. Its section revealed a smooth-walled cavity the size of a large billiard ball, evidently developed from a dilated lymph-space, and not the result of localized softening. The cavity is full of blood-stained coagulum. The tubes are shortened, the ovaries corrugated and non-cystic.

9. *Myoma of Uterus* (Dr. Way).—Mrs. J., *æ*t. 26, nullipara. Sent to Dr. Way by Dr. Lermite. She had only been married six weeks. Tumour consists of an impacted pelvic mass surmounted by a sessile abdominal portion the size of a large cricket ball. Weight of tumour, 7½ lbs. The tubes and ovaries are cedematous. There is a blood-cyst the size of a cherry in the left ovary, and a recent corpus-luteum in the right ovary. The round ligaments were hypertrophied, as can be seen from the stumps left on the specimen.

10. *Myoma of Uterus* (Dr. Way).—Mrs. B., *æ*t. 47, nullipara. Hillocky myoma of uterus, weighing 2½ lbs., accompanied by a right-side ovarian (Gophoronic) cyst, the size of a football. A down-growth from the posterior wall of uterus was wedged in between the uterosacral ligaments, and interfered with defæcation.

Remarks.—In the above cases of myomata, which were impacted in the pelvis, it is noteworthy that metrorrhagia was absent. Persistent and paroxysmal pain, constipation, and bladder symptoms induced the patients to seek advice. The ureters appeared to have enjoyed a certain immunity from pressure. In dealing with such tumours Way adopts Kelly's tactics, and attacks the more accessible side first, the tumour being pulled towards the opposite side; care is taken to cut adrift both round ligaments at equal distances from the tumour (uterus), and to cup the cervix slightly when cutting it across. Way uses tendon only for both ligatures and sutures. The cervical stump is pushed into full view with O'Sullivan's cup-forceps, and manipulated by an assistant. To ensure symmetry of suture-line the vesical or anterior edge of cut peritoneum, midway between the two round ligaments, is picked up by two or three of the deep sutures, which bring the section-surfaces of the cervix into coaptation. The rectal and vesical edges of cut peritoneum are then top-sewn by a continuous suture right across the pelvis, between bladder and rectum; no drain is used. The os resumes and retains its normal position.

In the case of Mrs. B. the co-existing ovarian cyst was treated as an integral part of the tumour, and was turned out with it, through a liberal incision planned in the first instance for delivery of a larger solid tumour than was actually present.

11. *Porte-thermocautère.*—An instrument devised by Dr. O'Sullivan for holding the thermocautery, so that

contact with the handle and the consequent risk of contamination is avoided.

12. *Tendons*.—A series of caudal vertebræ of the black wallaby, or scrub kangaroo, as removed with the tendons attached, shows that the suggestion of Dr. Girdlestone to remove each tendon separately involves an immense amount of useless labour and loss of time. The best tendons are those drawn from the freshly-killed animal and immediately placed in alcohol; the pellicle or synovial membrane remains on, and tends to maintain roundness of contour.

In the preparation of soiled (dried) tendons, as procured from bushmen, it is necessary to wash them in ether in order to remove the fat, and then to soften them in water, and remove the contaminated pellicle by drawing the thumb nail from the distal towards the proximal or muscle end of each tendon. If the tendon is stripped in an opposite direction it splits and frays out, and becomes flattened. As a rule tendons are kept in 1 in 1,000 corrosive, or 1 in 20 carbolic, but in course of years they become friable and discoloured. Tendons may be kept for years (I have some 13 years) in rectified spirits without deterioration; they tie as crisply as the best American catgut, and absorb moisture from the tissues and swell up.

If tendons are over-chromicised they are as incapable of absorption as silkworm gut, hence it is necessary not to overdo the process. In fact, for most purposes it is preferable to use tendons as near as possible in their pristine condition.

I have noticed that tendons absorb more quickly in the subcutaneous fat than they do in the peritoneal cavity (as tried on mares).

If there is any fear about the sterility of tendons they should be tested bacteriologically in sterile broth, etc., before using them on your patients.

Dr. MICHIE read "A Case of Intussusception of the Bowel." Drs. LONDON, A. E. WIGG, and SWIFT read papers on "Foreign Bodies in the Respiratory Tract."

A CASE OF INTUSSUSCEPTION.

By JOHN MICHIE, M.B., B.S., Hon. Visiting Officer to Out-Patients, Adelaide Children's Hospital, Adelaide.

A child, *æ*t. 4 months, was an out-patient at the Children's Hospital suffering from bronchitis, from which he had been almost cured. About 9 a.m. on the 3rd August his mother came to my house, and stated that the child had been ill all night, very restless, vomiting, diarrhoea, passing green, slimy motions; a Bismuth mixture was prescribed. About 2 p.m. she returned, and informed me that the child had been screaming incessantly, had vomiting, and was passing blood of a bright red colour; she produced a napkin, showing the nature of the motion. I suspected intussusception, and advised her to take him over to the Children's Hospital immediately; she did so, and about an hour later I saw him there. On examining him I found that he was somewhat collapsed, was screaming incessantly, with drawing up of the legs, and was passing blood of a bright-red colour.

Dr. Campbell anaesthetized him with chloroform first, then ether, and on making a digital examination, per rectum, the intussuscepted bowel could be easily felt, feeling very like a soft, flaccid os uteri.

The article published in the *Intercolonial Medical Journal*, of June, by Dr. A. J. Wood, on "Irrigation in Intussusception," was fresh in my memory, and I resolved to try the method recommended by him.

The buttocks were raised, and I attempted to distend the lower bowel with air by means of a Higgin-

son's syringe; this did not work very well, so I substituted the bellows, which was connected with a rectal tube passed well up the bowel; the nates were compressed to prevent the escape of the air. After distending the bowel with air the bellows was removed and a column of warm water was poured into the bowel through a funnel and tube connected with the rectal tube, the funnel being held about 2 to 3 feet above the level of the body. This, however, did not prove successful. I then tried the same procedure, only substituting a bicycle pump kindly provided by Dr. Morgan (who happened to be in the institution at the time) in place of the bellows. With this the bowel was well inflated with air, followed by the passage of a column of water as before stated. On massaging the abdomen over the site of the intussusception a slight gurgle could be detected. After some minutes the water, mixed with mucus-blood, was allowed to escape, and on making a rectal examination no tumour could be detected.

I might mention that the usual sausage-shaped tumour could not be detected by external examination, as the child was very fat.

The child, who was then somewhat collapsed, was put to bed, hot bottles being applied, and one grain of Dover's Powder was administered when he recovered from the anæsthetic. Some hours afterwards a green, slimy motion was passed, which was followed a little later by a feculent one. The child left the hospital about 36 hours afterwards; the motions were then natural in appearance, but he still appeared to be suffering pain. To combat this 1 grain of Dover's Powder was prescribed every 4 hours. On the following day the child was again brought to me apparently in a state of collapse, with contracted pupils. The motions meanwhile had been natural; the collapse was apparently due to some faulty preparation of the Dover's Powder. A warm bath and stimulants were ordered, which relieved the symptoms. He afterwards made a good recovery, and is now well and hearty.

Dr. LONDON read a communication on "Foreign Bodies in the Bronchi," which appeared in the *Inter-colonial Medical Journal of Australasia*, for March. He narrated the case of a boy set 8, in whose right bronchus a shirt stud remained for over a year; at first asthma was suspected, and later on phthisis. After a year had elapsed an attack of pneumonia occurred, which was followed by signs of abscess of the lung; the chest was explored, and the stud fell; after manipulation the stud was lost, and the operation abandoned; whilst recovering from the anæsthetic the boy coughed up the stud, and made a perfect recovery. Dr. London divides the course of such an occurrence into several stages, viz., (1) the *immediate condition of distress*, which may be slight or severe, and followed by an *interval of quiescence*, ranging in duration from a few seconds to a generation; (2) the stage of *irritation* and of *obstruction* of the *bronchus*; (3) the stage of *definite inflammation of bronchus, lung, or pleura*; (4) the stage of *septic infection* resulting in *bronchiectasis, abscess of lung, or empyema*. The paper concluded with some remarks on the etiology, diagnosis, prognosis, and treatment of such cases, together with a table of cases reported in Australasian Literature.

TWO CASES OF FOREIGN BODIES IN THE AIR PASSAGES.

By A. E. WIGG, M.D. BRUX., ADELAIDE.

The two cases of foreign bodies in the air passages, notes of which I relate this evening, present several points of difference. In one case the position of the foreign body was laryngeal; in the other, bronchial.

Owing to the difference in the position of the foreign bodies, the symptoms produced were widely dissimilar. In the laryngeal case the chief symptom was dyspnoea, from obstruction to respiration, and the necessity for immediate operative relief was urgent. In the bronchial case the symptoms were due to the irritation produced by the foreign body, and the urgency for operation less marked. The result of the treatment was, unfortunately, also different in the two cases; the laryngeal case rapidly recovered, and the bronchial case died after a month's duration.

Case I. Foreign Body in Trachea.—W. K., boy, aged 4 years. Whilst eating curried meat and rice for breakfast was suddenly seized with choking. A medical man who saw the boy ordered his removal to the Children's Hospital, where he arrived three hours afterwards, having to be brought from Fort Adelaide. On admission, the child was seen to be gasping for breath. There was marked indrawing of the ribs and sternum with inspiration, but expiration was not so difficult. The child was deeply cyanosed and semi-conscious, the extremities were cold and clammy, and the heart's action rapid and feeble.

Chloroform was administered in a small quantity, and tracheotomy rapidly performed. The first incision was made almost down to the trachea, which was opened without the usual dissection or delay in arresting hæmorrhage. The edges of the tracheal opening were well separated with a sinus forceps, and the dyspnoea was immediately relieved. On dilating the opening, a foreign body was seen protruding downwards between the vocal cords. This was seized with forceps, but some force was required to free it from its position. The body removed was a piece of sheep's rib, triangular in shape, and about $\frac{1}{4}$ inch in its greatest length.



A Durham's tube was inserted into the trachea, and the child immediately fell into a quiet sleep, which lasted for several hours. As there had been some difficulty in dislodging the piece of bone, and possibly some injury to the interior of the larynx, the tube was retained for 36 hours, and on removal the opening was closed with strapping, and was quite healed in two days. Had there been no injury to the larynx, I should have closed the tracheal wound immediately, but, with a possibility of œdema following, I considered it wiser to leave the tube in for a day or two.

In most cases where tracheotomy is required, the operator has time to carefully dissect down to the trachea, drawing aside muscles and vessels, and checking hæmorrhage as he proceeds. But sometimes, as in this case, every second is of importance, and unless the operation is performed rapidly the patient will die before its completion. The best plan then, and I have followed it several times, is to grasp the larynx and trachea, opposite the point at which the incision is to be made, between the thumb and forefinger of the left hand, make the incision midway between them, and go right down to the trachea with one or two strokes of the knife. Then, instead of losing time by inserting a hook into one of the rings and reversing the scalpel to cut upwards, as is described in text books, continue the incision straight on into the trachea by dividing one or more of the rings from above downwards; next, before

removing the knife from the wound, insert the point of a small sinus forceps (which is a far better instrument for dilating the opening than the usual tracheal dilator), separate the blades and retain them in the trachea until coughing and hæmorrhage have ceased, then, with the blades still dilated, insert the tube. In this case, where the patient was almost moribund, I was able to open the trachea in a few seconds by the plan I have described, and with every confidence of reaching it with safety.

Case II. Foreign Body in Small Bronchus.—Miss K., aged 30. About three weeks before present illness had a severe attack of quinsy, which left her in a weak condition.

On October 1st, 1897, I administered ether to the patient for teeth extraction. Whilst removing the right lower bicuspid, the operator missed the tooth, which with a snap disappeared from the forceps. He at once examined the throat and mouth, and not finding the missing tooth concluded that it had dropped upon the patient's dress, and proceeded with the operation. The patient recovered quickly from the effects of the anæsthetic, and coughed up blood, but not more violently than usual. Four days afterwards I was called to see the patient, who had been troubled with constant coughing since the operation. She had been unable to sleep, and was quite exhausted with the violence and persistence of the cough. Complained of soreness at lower end of the sternum. Attempts to speak or move brought on violent attacks of coughing. There was a small amount of expectoration, slightly blood-streaked. Knowing that a tooth was missed at the time of the extraction, and suspecting from the symptoms that it might possibly be in the air passages, I carefully examined the chest, but could detect no physical signs pointing to the presence of a foreign body. Inspiratory expansion was equal on the two sides, and percussion and auscultation gave negative results. Temperature was normal. I prescribed a sedative for the cough, but without relief. Failing by ordinary examination to detect or localize the tooth, an attempt was made to do so by the use of the Röntgen rays, but, owing to the patient being unable to remain quiet, this too was unsuccessful. She remained in the same condition for three days, and then became slightly feverish. On October 8th (a week after the dental operation) there was slight dulness at the right base at the back, otherwise physical signs were normal. In consultation with Dr. Marten, it was decided to perform tracheotomy, so as to facilitate the expulsion of the foreign body, and she was removed to a private hospital for operation. Just before leaving home she suddenly coughed up a considerable quantity of pus, mixed with blood, and continued to bring up smaller quantities afterwards. Tracheotomy was performed, the patient was inverted, a probe was passed through the wound down the bronchial tube, but nothing could be felt, and, though she coughed violently for a time, nothing was expelled. She was much relieved by the operation; less cough, and could sleep well. The edges of the wound were kept open by silk threads passed behind the neck, and a tube was worn at intervals for a week. The temperature varied from 101° at night to normal in the morning. On the 23rd October the temperature rose to 104°. She had great pain over right inframammary region, and friction sounds were heard over same area. Dulness developed at the right base, back and front, and breath sounds became inaudible. An aspirating needle was passed in four places, but no pus was obtained, and another attempt was made two days later to reach the abscess, but without result. Patient now began to expectorate

large quantities of most offensive pus, and this continued for eight days, and then the patient succumbed from exhaustion.

Autopsy.—A large empty empyema was found on the right side, communicating with a small abscess in the middle of the lower lobe of the right lung, and this again communicating with a bronchus. Near the abscess a decayed bicuspid tooth was found, tightly impacted in one of the smaller bronchi, the fang being in the smaller end of the tube. Other organs healthy.

This unfortunate case was due to an almost unavoidable accident. The operator appeared to me to have exercised every care during the extraction, and it seemed that the pressure of the forceps levered the tooth from its socket, that it struck the back of the forceps or palate, and rebounded with force into the larynx. It certainly was not dropped from the forceps. Had the patient not been under an anæsthetic she would probably have coughed the tooth up at once, but, being fully unconscious, with each inspiration the tooth was drawn further down into the air passages. The weight and shape of the tooth facilitated its being carried rapidly down, the tapering fang easily following the direction of the bronchial tube, and the sharp, irregular, decayed edges of the crown preventing its ejection by coughing, and so it travelled on until it became checked by the diminishing lumen of the tube. The position of the tooth in a small bronchus accounted for the absence of any sign of a large area of lung being affected, and the only signs developed later were those due to the irritating effects produced by the tooth, viz., signs of inflammatory consolidation, then of pulmonary abscess; this, finding its way to the surface, causing, first, pleurisy, and then bursting into the pleural cavity and creating an empyema. Owing to there being a through communication from the empyema to a bronchus, the empyema was continually being emptied, and so we failed to strike pus by aspiration. From the position of the tooth, firmly impacted in the bronchus, it could not possibly have been coughed up, nor could it have been discharged by any external opening in the empyema, unless the patient could have withstood the exhausting process of its liberation by the further destruction of lung tissue.

It is difficult to see how the possibility of this unfortunate accident happening during dental extraction is to be avoided. Some operators recommend the use of the oral net spoon, which must be more or less in the way of the operator, and the use of sponges would interfere with free respiration. Still the record of this case, it is to be hoped, will impress upon operating dentists the necessity for exercising every possible precaution against accidents of a similar kind.

NOTES OF TWO CASES OF FOREIGN BODIES IN THE AIR PASSAGES.

BY H. SWIFT, M.D. CANTAB., ADELAIDE.

On May 27, 1897, driving down a street in New Thebarton, I was stopped to see a child who was said to be choking. The patient, two years old, whilst playing on the floor, was suddenly seized with a violent fit of coughing, and, as the mother remarked, "went black in the face." When I saw the child within a few minutes of the onset of symptoms it was a little better, but there was a considerable amount of dyspnoea, with recession at the epigastrium, and a barking, hollow cough. It was perfectly well before the attack. The mother thought it had "swallowed" a piece of bone or meat. I advised that the child should be taken to the Children's Hospital at once, intending to do trache-

otomy straight away. At the hospital I thought I could hear less air entering the right lung than the left, with some slight whistling inspiration, but there was much less distress, and as there was difficulty in regard to assistance at the operation, I put the latter off, leaving word that I was to be called at once in case of need. There was no change on the 28th. On the 29th the breathing was more laboured; there was marked impairment of movement of upper part of right chest; hardly any air was entering this part of lung. Respirations were 76. Temperature was 101.8°. Chloroform was administered, and the trachea was opened; the sides of wounds were held open by silk retractors. The trachea was explored by a long probe, which set up a good deal of coughing. On one occasion I thought I could feel a hard substance, but the coughing was so incessant it was very difficult. The child was held up by the legs two or three times without result. A probe was again passed. During the attack of coughing I saw a dark rounded body in the wound for a second, but before I could seize it it was sucked back again and appeared no more; all further attempts to dislodge or seize it proving futile. A tube was inserted. There was not much change in the child's condition during the next four days; the breathing was laboured, and ranged from 45-60 per minute. Temperature kept about 101°. Upper part of right lung was dull, and no air entered it. On the fifth day, during an attack of coughing there was suddenly acute dyspnoea, and the child fell back dead.

At the *post-mortem* a small screw was found just above the tracheotomy wound, but the dissection had probably dislodged it, as it could not have got into this position owing to the tube. I think that the screw was moved from the right bronchus, and became fixed in a horizontal position across the bifurcation of the bronchi.

Nancy C., *æ.t.* three years and a half, was admitted into Great Ormond-street Children's Hospital on May 5, 1885. The mother stated that four weeks before admission, the child, having previously been perfectly well, suddenly began to breathe badly, as though she had croup, with a good deal of dry cough. The child herself said that a little brother had put a piece of nutshell in her mouth, and she had swallowed it. The mother had treated her for croup with steam, compresses, &c., until the night before admission, when she was taken much worse and was nearly suffocated during the night.

On admission the child looked much distressed, and breathed with crowing inspiration. Some cough of a croupy character. Air was entering both bases feebly but equally. On the 6th was fairly well. On the 7th there was a good deal of laryngeal stridor. On the 8th she had a very bad fit of obstructed breathing; marked stridor, inspiratory as well as expiratory. The two sides of chest moved equally. During an attack of coughing I listened at the side of trachea, and thought I could distinguish something moving in the trachea. Mr. Marsh did tracheotomy at 7 p.m.; no foreign body detected; larynx was apparently empty; child was inverted and shaken; breathing was much relieved by operation. On the 9th there was a well marked rash of scarlet fever. Up to the 22nd she was doing fairly well. A soft rubber tube had been inserted instead of silver. 23rd: Wound looked sloughy, with ragged sides. The tube was taken out to be cleansed, and I had very great trouble to get another one in, and then only a bivalve one. The wound bled freely, and there was much distress and cyanosis. Child very weak afterwards. On 25th, rubber tube inserted again; wound healthy. On 28th tube taken out to be cleaned;

much cough; dilators were inserted without much relief. Suddenly, with a violent expiratory effort, she expelled a piece of nutshell, about a third of an inch wide by same length. She made an interrupted recovery.

The chief difficulty that faces the medical man is the diagnosis. In the majority of instances the patient is a very young child, whose story is not to be relied upon. The parents, as a rule, have not seen the child put anything in its mouth. The auscultatory symptoms may be negative, as in my second case. There is only the suddenness of the onset of the symptoms to guide him. Of course, in a straightforward case, where the patient is seen to put some foreign body into the mouth, and then with an inspiratory effort draw it into the air passages, and who is then seized with violent cough and dyspnoea, the diagnosis is easy, and so is the adoption of the line of treatment. Tracheotomy should be resorted to at once, and the air passages upwards and downwards examined as carefully as possible, and all known means used to remove the foreign body. But if there is a doubt about the "swallowing" of a foreign body, then, although a very careful examination is made, the symptoms may still be ill-defined, and it requires a good deal of determination on the part of the surgeon to say that such a serious operation as tracheotomy must be performed. When the operation has been decided upon it should be performed as quickly as possible. The incision into the trachea should be longer than in an ordinary tracheotomy for the insertion of a tube, in order to allow of the more easy removal of a foreign substance. As soon as the incision into the trachea is made, silk retractors should be inserted, and the edges kept as wide apart as possible. The air passages should then be well explored, and either the operator or an assistant should be ever ready with a pair of forceps to seize, if possible, a foreign body. A great difficulty in young children is produced by the narrowness of the lumen of the trachea.

The lumen being so small, it is impossible to pass even the narrowest pair of forceps down without touching the sides of trachea, and so setting up cough; and if coughing is set up, it, of course, renders the seizure of a foreign body much more difficult, and in most cases impossible.

If I have another case, and am unable to remove the foreign body at the operation, I shall not insert a tube, but shall endeavour to keep the wound open by means of silk retractors, so that there may be no obstruction to the exit of a body during coughing.

My second case is remarkable for the length of time that the foreign body was in the trachea. It was in four weeks and three days before the operation, and twenty days after, so that it was seven weeks and two days in the trachea without setting up any serious trouble.

If the foreign body is removed or coughed up at the time of the operation, I think the best way is to stitch up the wound at once, and try to get primary union.

(The trachea, with screw in right bronchus, was shown.)

On the proposition of Dr. VERCO, the discussion on these papers was adjourned till next meeting.

Minutes of last meeting were taken as read, on proposition of Drs. VERCO and HARROLD.

CORRESPONDENCE.—Letter from Mrs. O'Connell, thanking members of Branch for letter of sympathy. Walter Blaxland, F.R.C.S. Eng., L.R.C.P. Lond., and Herbert Richard Letcher, M.B., Ch.B. Melb., elected members of the S. A. Branch of the B.M.A.

PROCEEDINGS OF OTHER SOCIETIES.

ROYAL SOCIETY OF TASMANIA.

THE annual meeting of the Medical Section was held on the 23rd March, when the following were present:—Drs. Bright (in the chair), Clarke, Giblin, Butler, Wolfhagen, Spark, Macgowan, Jamieson, Crowther, Scott, Sprott, and Crouch.

An apology was received from Dr. Barnard.

Minutes of last meeting were read and confirmed.

The following members were elected as office-bearers for 1898:—Patron, Sir James Wilson Agnew; President, Dr. B. S. Bright; Vice-Presidents, Drs. E. L. Crowther and G. H. Butler; Hon. Treasurer, Dr. A. H. Clarke; Hon. Secretary, Dr. Gregory Sprott; Committee-men, Drs. Wolfhagen and Barnard.

Dr. Naylor, who has left the colony, sent in his resignation, which was accepted.

The Secretary reported that he had received a copy of the "Archives of Skiagraphy" by Sydney Roland, and the "Medical Annual" for 1897, from Dr. Crouch for the medical library. The President thanked Dr. Crouch for his liberal gift.

The Treasurer reported that he had a balance in hand of £20, part of which is intended for the purchase of books of reference.

A lively discussion took place on the question—"Whether a medical practitioner should meet a homœopathic practitioner professionally"; and it was finally resolved on the motion of Dr. A. H. CLARKE, seconded by Dr. E. J. CROUCH,—"That this Society is of opinion that no legally qualified medical practitioner is justified in meeting professionally a homœopathic or any other irregular practitioner." This resolution was carried unanimously, and the section will now have to decide who are the homœopathic and the irregular practitioners of Hobart.

NEW SOUTH WALES MEDICAL UNION.

FIFTH ANNUAL MEETING.

THE Fifth Annual Meeting of the members of the N.S.W. Medical Union was held at the Editor's Library, Bathurst-street, Sydney, on March 30. Dr. F. H. Quaipe was in the chair. There were also present: Drs. Hankins, C. A. Edwards, Charles MacLaurin, T. Harrison, Matheson, T. M. Martin, Crago, Coutie, McCormick, P. J. Collins, C. F. Eichler, G. H. Abbott, Rennie, B. Worrall, P. M. Wood, W. Chisholm, E. T. Thring, C. Dagnall Clark, Joseph Parker, Fiaschi, S. T. Knaggs, Foreman, W. A. West, Carruthers, G. Lane Mullins, Sydney Jamieson, A'Beckett McCarthy.

The HONORARY SECRETARY (Dr. Lane Mullins) read the minutes of the previous Annual Meeting, which were confirmed.

Apologies for non-attendance were received from Drs. E. J. Jenkins, Walter Spencer, P. Muskett, and R. L. Faithfull.

Dr. MULLINS read the

FIFTH ANNUAL REPORT, 1897-98.

It is with the greatest gratification that the Council reports another year of uninterrupted success.

During the year our number of members has increased from 195 to 256.

Our thanks are again due to the local honorary secretaries throughout the country for the interest they have displayed, and for their efforts to induce medical men in their respective districts to become members. Dr. Thomas J. Henry has been appointed local honorary secretary for Grafton and district.

Several cases were considered by the Council:—

1.—Member in a country district wrote, stating that he had been called upon to give evidence in a case of alleged assault committed on a child by a patient of his, while the said patient was suffering from gonorrhœa. He desired the opinion of the Council as to the privileges of medical witnesses under such circumstances. The matter was referred to Dr. B. H. Todd for counsel's opinion, which was to the effect that there was no privilege, and that the question as to whether the medical witness should divulge professional secrets could only be settled, in each instance, by the presiding Judge, whose order must be obeyed. Dr. Todd's opinion was published *in extenso* in the *Australasian Medical Gazette* for June, 1897.

2.—Practitioner in Sydney threatened with an action for alleged carelessness in the administration of an anæsthetic. The Council decided to support the member, and passed the sum of £50 for expenses, if needed. This case has not been proceeded with, and has apparently been dropped.

3.—Country practitioner threatened with an action for alleged unskilful treatment. The Council decided to accord its moral support, being unfortunately debarred from giving pecuniary assistance, owing to the member having joined the Union after the alleged attendance on the patient had taken place. The case was dropped in an early stage.

4.—City practitioner became involved in an action at law, owing to his having, in accordance with the provisions of the Dairies Supervision Act, reported a case of typhoid fever occurring in a dairy. The case was taken into court, and our member gained a verdict. The Council rendered our member every assistance within its power, and defrayed the necessary expenses.

In several other instances members, both in the metropolis and country, applied for advice on various matters.

Actions against medical men are now becoming infrequent. The existence of the Medical Union, to which practitioners can look for support, is apparently sufficient to prevent blackmailing and vexatious actions. The Union is now strong financially and numerically, and is well able to defend any member who may find himself wrongfully involved in a lawsuit. In one instance only has a suit been taken into court during the past year, and then our member was successful.

On May 14, 1897, the Council declared the People's Prudential Benefit Society, Limited, to be a society prejudicial to the interests of the profession, within the meaning of Rule 3. Medical officers of that society are now ineligible for membership of the Union.

On September 29 last a general meeting of the members was held, when it was decided to impose an entrance fee of one guinea on all new members joining on or after March 1, 1898.

The thanks of the Council are due to the Council of the New South Wales Branch of the British Medical Association for the use of the Editor's Library for all meetings.

The hon. treasurer's statement, which is now before you, shows a credit balance of £814 9s. 10d.

During the year five Council meetings were held. The number attended by each member was as follows:—Dr. Collins 5, Dr. Crago 5, Dr. Foreman 5, Dr. Hood 5, Dr. Jamieson 5, Dr. Knaggs 5, Dr. Mullins 5, Dr. Muskett 5, Dr. Brady 4, Dr. Fiaschi 4, Dr. Quaipe 4, Dr. Faithfull 3, Dr. Jenkins 3, Dr. Carruthers 2, Dr. Wood 2, Dr. Coutie 1.

F. H. QUAIPE, M.D., Chairman.

A. JARVIE HOOD, M.B. } Joint

G. LANE MULLINS, M.D. } Hon. Secs.

121 Bathurst-street, Sydney, March 15, 1898.

The report was adopted on the motion of Dr. MULLINS, seconded by Dr. FOREMAN.

Dr. CRAGO (hon. treasurer) read the Statement of Receipts and Expenditure for the past year. (See below.)

In moving the adoption of the report, Dr. CRAGO mentioned that the sum in hand (including 225 subscriptions for 1898-99) amounted to £1062 18s. 4d. Dr. THRING seconded the motion.

The CHAIRMAN said the meeting would be with him in congratulating the hon. treasurer on the position of the Union, and also in acknowledging the services rendered by Dr. Crago.

The motion was carried.

The CHAIRMAN then declared the following office-bearers elected for 1898-99:—Councillors, Drs. A. J. Brady, C. U. Carruthers, P. J. Collins, R. L. Faithfull,

J. Foreman, Sydney Jamieson, E. J. Jenkins, Samuel T. Knaggs, P. E. Muskett, P. M. Wood; hon. treasurer, Dr. W. H. Crago; joint hon. secretaries, Drs. A. Jarvie Hood and G. Lane Mullins; auditors, Drs. John Steel and E. T. Thring.

Dr. LANE MULLINS made an announcement regarding a legal opinion furnished to the Council *re* suing for fees in court. A discussion ensued, in which Drs. Coutie, A'Beckett McCarthy, West, Parker, Clark, and Carruthers took part.

Dr. T. M. MARTIN thanked the Union for the support accorded to him in the action recently instituted against him. He stated that this support inspired him with confidence, and relieved him of a vast amount of anxiety.

Statement of Receipts and Expenditure for the Year Ending Feb. 28, 1898.

	£	s.	d.		£	s.	d.
To Balance forward from previous year ...	571	7	10	By Legal opinions ...	10	10	0
„ 256 Subscriptions received, at 21s. ...	268	16	0	„ Dr. Gwynne-Hughes' Legal Expenses... 11	2	0	
„ Interest received ...	0	12	11	„ Printing and Stationery ...	16	4	11
„ Amount added for exchange ...	1	10	0	„ Petty Cash ...	10	0	0
				„ Credit Balance* ...	814	9	10
	<u>£862</u>	<u>6</u>	<u>9</u>		<u>£862</u>	<u>6</u>	<u>9</u>

*£600 bearing interest in Savings Bank of N.S.W., and £200 at Fixed Deposit in the Union Bank of Australia Ltd.

PARTICULARS OF PETTY CASH ACCOUNT.

	£	s.	d.		£	s.	d.
Mar. 1, 1897. To Balance in hand ...	1	16	6	By Stamps ...	6	11	3
„ Cheques received ...	10	0	0	„ Exchange ...	3	5	6
				„ Clerical Assistance ...	1	10	0
				„ Cab ...	0	3	0
				„ Telegram ...	0	1	0
				„ Balance in hand ...	0	5	9
	<u>£11</u>	<u>16</u>	<u>6</u>		<u>£11</u>	<u>16</u>	<u>6</u>

Examined and found correct.

Mar. 8, 1898. THOMAS M. MARTIN, } Auditors. WM. H. CRAGO, }
GORDON MACLEOD, } Mar. 1, 1898. Hon. Treasurer.

THE EASTERN SUBURBS MEDICAL ASSOCIATION OF SYDNEY.

A GENERAL meeting of the above association was held on March 31st at the Editor's Library, 121 Bathurst-street, Sydney, at 4.15 p.m. Dr. F. H. Quaife was voted to the chair in the absence of the President. The following business was transacted:—(1) *Annual reunion of N.S.W. medical associations*: A communication was made from Dr. Kyngdon, of North Sydney, requesting co-operation in the picnic proposed by his society as the form of annual reunion of N.S.W. medical associations for 1898. Support was promised. (2) *Lodge fees*: The following resolution was carried unanimously: "That the various Friendly Societies of the Eastern Suburbs that have not already adopted the practice of paying fees for miscarriages be asked to grant to their medical officers the same fees for

miscarriages that are now allowed for confinements." A sub-committee, consisting of Drs. Lamrock, Walton-Smith, and P. J. Collins, was appointed to carry out the foregoing resolution. (3) *People's Prudential Benefit Society, Ltd.*: It was resolved unanimously that "No medical officer of the People's Prudential Benefit Society, Ltd., be admitted a member of the Eastern Suburbs Medical Association until three years after his secession from the said Benefit Society." The Hon. Sec. was instructed to write to a certain druggist in reference to the above benefit society. (4) *British Medical Association Council elections*: It was resolved "That the Council of the British Medical Association be requested to kindly give instructions to its secretary in future elections of the Council, to obtain the consent of each candidate proposed before issuing the lists of nominations for office-bearers for each year."

NEW SOUTH WALES MEDICAL BENEVOLENT FUND.

The annual meeting was held at the Royal Society's Room on Friday, 25th March, Dr. C. P. B. Clubbe in the chair.

DR. MORGAN MARTIN read the annual report.

"N.S.W. MEDICAL BENEVOLENT FUND.

"MR. CHAIRMAN AND GENTLEMEN,—The original subscribers to this fund having framed a rule that the committee was to report at every annual meeting on all business transacted during the year, it is my duty to make a report, which I shall do as briefly as possible. The first case which came before the committee was that of Dr. Ewington, of Bankstown, to whom they had lent a piano for the use of his wife and daughter, who represented that by means of it they might be able to earn sufficient to support him. Previously he had been granted the sum of 10s. a week, which was stopped about a month after he had received the piano. He now (7th May) applied that the amount might be continued, and the committee decided to allow him 7s. 6d. per week for three months. On the 19th November, he having again applied for assistance, it was decided to allow him 10s. a week as long as the funds would permit, and to ask him to return the piano. But on a further request from Mrs. Ewington, on the 4th January, it was decided to still leave it in her hands in the hope she might by means of it be able to augment their income. In all they have received since the 1st January, 1897, £21 17s. 6d.

"The next case which came before the committee was that of a Dr. Alfred Williams, to whom, however, they only gave a small sum (16s.) to relieve his immediate wants. Similarly they granted £1 to the wife of Dr. Hugh Erskine Cooper, whom they believed to be at the time

in actual want of the barest necessities of life. Also a sum of 5s. to a Mr. Parsons, for like reasons.

"The sum of £10 was granted to Dr. Charles Brown, who arrived in Sydney in a pitiable condition in the guise of a swagman, which was spent in supplying him with a new rig-out, and paying his fare to the country. I believe he has since returned, and is practising in Sydney.

"An application for help was received from a Mrs. Freshfield, who represented herself to be the widow of a medical man in England, but the committee declined to entertain the application.

"On the 4th January Dr. Sydney Jones resigned his position as trustee of the fund, and the committee decided that for the rest of the year I (Thomas M. Martin) was to act in his place as regards signing cheques, &c."

DR. FAITHFULL (hon. treasurer) read the balance-sheet.

DR. QUAIFFE proposed, "That the report and balance-sheet as read be adopted; seconded by Dr. POCKLEY, and carried.

DR. CRAGO proposed "That Drs. Faithfull and Morgan Martin be the trustees of the fund;" seconded by Dr. QUAIFFE, and carried.

DR. J. A. DICK proposed "That Dr. F. W. Hall be hon. secretary to the fund;" seconded by Dr. CRAGO, and carried.

Drs. Fiaschi and Quaife were re-elected as committeemen.

DR. FIASCHI proposed, "That a vote of thanks be accorded to Dr. Morgan Martin, the retiring hon. secretary;" carried.

DR. WEST suggested that a further effort be made to obtain subscriptions from the country practitioners, so that the fund might be considerably added to.

Medical Benevolent Fund of New South Wales—Treasurer's Balance-sheet.

RECEIPTS.		EXPENDITURE.	
	£ s. d.		£ s. d.
To Balance brought forward and lodged in Commercial Bank	30 10 1	By Amount paid Mrs. Ewington from 19th January, 1897, to 17th March, 1898 ...	20 17 6
„ Cash received and lodged in Commercial Bank... ..	31 10 0	„ J. A. Thompson's account (printing) ..	0 17 7
„ Cash received by Secretary	5 7 0	„ Jas. Gordon's account (piano)	15 10 0
		„ Dr. C. Broom, per Dr. M. Martin	10 0 0
		„ Amounts paid by Secretary out of cash received—	
		Stamps	1 3 2
		Printing Circulars	0 15 0
		Mrs. H. E. Cooper... ..	1 0 0
		Mr. Parsons	0 5 0
		Carriage of piano	0 6 10
		Dr. Williams	0 16 0
		Mrs. Ewington	1 0 0
		Bank Exchange	0 1 0
		„ Balance Cash in Bank	*14 15 0
	<u>£67 7 1</u>		<u>£67 7 1</u>

* There is also a fixed deposit of £100 to the credit of the fund.

24th March, 1898.

R. L. FAITHFULL.

THOMAS M. MARTIN.

Examined and found correct, 25th March, 1898.

W. H. CRAGO.

MEDICAL BENEVOLENT FUND.

SUBSCRIPTIONS for the current year have been received from the following:—Drs. G. H. Abbott, G. Armstrong, F. A. Bennet, Barrington, Brady, Chenhall, Chisholm, D. Clark, Clubbe, Collins, Crazo, Davies (Hillston), J. A. Dick, Eichler, Faithfull, Fiaschi, Fordyce, Foreman, Gledden, F. W. Hall, Hankins, Jarvie Hood, S. H. Hughes, Isbister, Knaggs, Machattie (Bathurst), Maitland, T. Morgan Martin, Mullins, Gordon MacLeod, McMurray, Pockley, W. Pierce, F. H. Quaife, C. Read, Fairfax Reading, Rennie, Fairfax Ross, R. U. Russell, Scot Skirling, Walker-Smith, P. Stanley (Tamworth), Todd, Tidswell, T. B. Walley (Tamworth), West, P. M. Wood, Worrall.

Those who have not yet subscribed are requested to send the annual subscription of five shillings to

F. W. HALL, M.D.,

18 College-street, Hyde Park, Sydney.

The donations received will be duly acknowledged in the *Australasian Medical Gazette*.

NEW INVENTIONS.

THE STETHOSCOPE.

A NEW INSTRUMENT FOR AUSCULTATION.



WE have received from Messrs. S. Maw, Son and Thompson, of London, through Messrs. Newman and Snelson, of 78 King-street, Sydney, a sample of the above instrument.

The Stethoscope is an instrument constructed on the same principle as the microphone, and can be attached to any ordinary binaural stethoscope, and when not in use, can be carried in the pocket without the slightest inconvenience. By its use the sounds are rendered much more pronounced than is the case when an ordinary stethoscope is used. This is exemplified in regard to the lung-sounds. In regard to the heart, the relative loudness of the normal sounds—always a very important point—is most accurately determined. The instrument is fitted with a tap, by means of which the amount of sound reaching the ears can be regulated to a nicety.

Our experience in the use of this instrument has been most satisfactory.

[This instrument can be obtained from Messrs. W. S. Park and Sons, 186 Pitt-street, Sydney.]

REVIEWS.

ETHNOLOGICAL STUDIES AMONGST THE NORTH-WEST-CENTRAL QUEENSLAND ABORIGINES. By Walter E. Roth, B.A. Oxon.; M.B.C.S. Eng.; L.R.C.P. Lond.; Late Nat. Science Demy of Magdalen College, Oxford. Brisbane: By Authority: Edmund Gregory, Government Printer, 1897.

This is without doubt the finest treatise on the ethnology of the Australian aborigines that has yet appeared. Dr. Roth from 1894 to 1897 held the office of surgeon to the Boulia, Cloncurry, and Normanton Hospitals, and thus had unrivalled opportunities for making inquiry into the language, customs, and habits of the N.W. Central Queensland aboriginals. At

Boulia, most of his time was devoted to a study of the local (Pitta Pitta) language, and in this way his extensive knowledge of the ways of the blacks was acquired. We have, unfortunately, not sufficient space to point out the gems of Dr. Roth's book, but we cannot pass over that part which deals with Disease. The Death-bone, or bone apparatus, which has the supposed property of producing sickness and death, is described at some length, as also are the Pearl-plate (a flat, triangular piece of pearlshell, with rounded angles), the Death-powder (which, placed near the victim, will kill him quickly), and the Bone-pin. Incurable blindness is in the case of men accounted as a punishment for a continued persistency in raping married women when alone and unprotected out in the bush. The various ailments and the strange remedies employed for their relief by the "doctors," the pills, poultices, charms, and drugs in use, the methods of burial of the dead, are also well described.

The chapter entitled "Ethno-Pomography" is probably the most complete account of the tribal initiation and other ceremonies, &c., ever published.

The illustrations are excellent, but we cannot help wishing that they were placed in the text instead of at the end of the book.

Dr. Roth is to be congratulated upon the results of his efforts, and we as a profession may feel proud that one of our number has been the first to write a complete account of the habits and customs of a fast dying race.

DISEASES OF THE GALL-BLADDER AND BILE DUCTS.

By A. Mayo Robson, F.R.C.S.; Member of the Council, and Hunterian Professor of Surgery and Pathology, Royal College of Surgeons of England, &c., &c. London: Baillière, Tindall and Cox, 1897. Sydney: L. Bruck. Price, 7s. 6d.

This book consists of five chapters dealing with—I., Introductory, with Anatomical References; II., Inflammatory Affections; III., Intestinal Obstruction; IV., Tumours of the Gall-Bladder and Bile Ducts; V., The Surgical Treatment of Gall Stones, or Cholelithiasis; and a Tabulated Consecutive Series of 170 Operations on the Gall Bladder and Bile Ducts—being the lectures delivered at the Royal College of Surgeons of England by the author as Hunterian Professor, in 1897.

In these lectures the author has brought well up to date his own great experience in this branch of surgery. Since the publication of "On Gall Stones and Their Treatment," in 1892, Professor Robson has been the recognised authority on affections of the gall-bladder, so that it is needless to say more than that the book under review is authoritative on the subjects with which it deals. The chapter on Treatment enumerates the various operations (from Cholecystotomy to Cholechoenterostomy), and their respective indications. The success of the author in operations on the gall-bladder, showing a mortality of only 1.7 per cent. in all his cases of Cholecystotomy—including the infective Cholangitis and deeply Jaundiced cases—is highly satisfactory. We cordially recommend this book to everyone who wishes to keep abreast of the knowledge in this particular branch of surgery. The illustrations are numerous and extremely good, and the whole work is turned out in the publishers' best style.

LETTER TO THE EDITOR.

BERI-BERI.

(To the Editor of the *Australasian Medical Gazette*.)
SIR,—I have had the opportunity of observing an epidemic of "Beri-Beri" occurring in this district (Central Queensland), which to me has proved most

instructive, and I venture to believe that some record of my experiences may also prove of interest to your readers.

The district is chiefly pastoral, situate well within the tropics, between three and four hundred miles from the sea, and has an altitude of about 700ft. above sea level. It consists of undulating plains richly grassed but sparsely timbered, and is subject to protracted droughts, a very trying and severe one having lately ended, and the disease in the bulk of the cases appears to have been caused by the conditions resulting therefrom.

Although I have seen other cases of Beri-Beri both here and in other parts of Queensland, I will first refer to a batch of cases coming in for treatment from the surrounding district during the months of December, January, and February just passed, and which I have termed an epidemic. Those coming under my immediate notice numbered twenty, but many others must have occurred.

The symptoms varied much in severity and extent. The constant symptoms were acceleration of the pulse, numbness and insensibility of the calves of the legs and feet, a turning inwards of the toes, weakness and partial paralysis below the knees, associated with a typical hobbling gait, and more or less oedema of the legs. Absence of knee reflex complete in the majority of cases. Tongue weak, but clean; appetite generally good; sleep natural; temperature, except in earlier stage, sub-normal. In severe and unfavourable cases, together with the symptoms mentioned, were added tumultuous cardiac action and pulsating arteries, general anasarca and dyspnoea. Of the fatal cases, three in number, one died after three months' illness, one about the eighth day, and one after six weeks' illness; the final cause of death being syncope, the mind remaining clear to the last. In these fatal cases there had been delay in seeking relief. Two men died *en route* to hospital of what I have no doubt to have been Beri-Beri. In favourable cases the pulse rate first diminished, then the oedema of legs, followed by return of sensibility and improvement in the gait, and usually in the order named. But in one case only, even in apparently complete convalescence, was there any return of the patellar reflex.

The duration of treatment averaged about fourteen days, the treatment being dietetic and tonic, with diuretics in the early stage.

The onset of the disease was usually described as sudden, mostly discovered on waking in the morning, the attention being directed to the swelling of the legs and the associated numbness and weakness. All ages, from early youth to three score odd, were represented. No females were attacked. Those at purely pastoral pursuits suffered equally with well-sinkers and tank and dam workers. There has been no instance of a resident of the town, or any one living at a head station, being attacked. The cases came from no one particular quarter or camp, but from all parts of the district, the distances varying from 20 to 200 miles. At the time the epidemic commenced, a severe drought prevailed. The creeks were low, and naturally the water scarce and foul. But, nevertheless, some of those attacked assured me that they had drunk none but bore water (proved to be wholesome for domestic use).

There were but few complaints of rations, fresh meat being easily obtainable. At the same time, the one prevailing condition among those attacked seemed to be the absence of vegetables and fruit, for which the drought was responsible, and in this absence of vegetables only can I find that the food consumed, in-

clusive in many cases also of the water used, differed essentially from that of the town and head stations, in which, as I have said, no cases arose.

There were no symptoms of scurvy among any of them, although the evidence seems to point to a dietetic origin of the outbreak. So far, I have referred to the batch of cases coming under observation during a recent and limited period, and exhibiting the typical symptoms of Beri-Beri in a manner rendering the diagnosis unmistakable. I now come to the question as to whether Beri-Beri is a new disease in Australia, or, at all events, whether it has received full recognition.

I do not remember seeing any Australian reports of the complaint, and have no access to medical literature which might correct that impression.

And here I would like to say that while in no wise indebted to Dr. Patrick Manson in his introductory address to students at St. George's Hospital College (*vide British Medical Journal*, October 9, 1897) for recognition of this disease, yet his remarks therein re tropical diseases have emboldened me to make this communication, and to acknowledge and recognise errors of diagnosis.

I have now been a resident of tropical Queensland for fifteen years, twelve of which were spent in Herberton, and three in Winton. The first recognised cases of Beri-Beri seen by me were under the care of the late Dr. White, the medical officer to the Geraldton Hospital, who had recognised the disease, and drawn my attention to them. This was in August, 1895. The May following I was appointed to the hospital here (Winton), and from time to time have admitted cases recognised as such, but have to admit that I passed over several cases which my larger and more recent experience would have enabled me to recognise as suffering from Beri-Beri or its sequelae, and I am now convinced of similar errors of diagnosis extending back to the first years of my practice in Queensland.

So much for my personal experiences and observations. I have gathered from miners and others, who were in Thornborough and on the Palmer in the early days of those diggings, that many suffered, and deaths occurred, from a disease they called the "Caledonia Flash." The symptoms described were swelling and weakness of the extremities, and a peculiar walk. The cause was ascribed to mixed arsenical and antimonial poisoning. I have also heard of unusual fatalities among the blacks, said to be due to "congestion" and "inflammation" of the lungs. In one instance a member of a suffering tribe was sent to me, and I think I should now diagnose the case as one of Beri-Beri.

The experience of other practitioners in tropical Queensland, or, rather, Australia, would show much light on the subject.

Certainly, if my surmises are correct, Beri-Beri is much more prevalent than is generally supposed, and the fuller recognition of the complaint would lead to the revising of many a case of "Morbus Cordis," "Peripheral Neuritis," "Malarial Cachexia," &c., &c. *Vide* Dr. Patrick Manson.

I am, Sir, &c.,
W. D. BOWKETT, M.B.C.S., L.S.A.,
Surgeon to Winton Hospital.

Central Queensland, March 30, 1898.

The Scottish Medical and Surgical Journal for February, 1898, under the section Medicine devotes a page giving a resumé of an article published in the *Australasian Medical Gazette*, August, 1897, by Dr. H. M. O'Hara, of Melbourne, on "A Cure of a Case of Septicæmia by Injections of Serum from a Patient Recovering from the Same Disease."

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, Queensland, South Australian, Victorian and New Zealand Branches Free of Cost.

Subscriptions (£2 2s. per annum) should be forwarded to the respective Branch Treasurers as below:—

New South Wales, Dr. Crago, 34 College Street, Sydney; Queensland, Dr. A. W. Orr, Brisbane; South Australia, Dr. T. W. Corbin, Adelaide; Victoria, Dr. J. R. M. Thomson, Essendon; New Zealand, Dr. Graham Campbell, Christchurch, New Zealand.

SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
H. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH APRIL, 1898.

EDITORIAL.

UN SOUND AND ADULTERATED FOOD.

THERE can be little doubt that unsound food is sold in large quantities throughout the Australasian Colonies.

Adulterated and impure foods are the cause of many diseases in this country. Putrid animal food causes severe pains in the abdomen, with vomiting and diarrhoea. This is more likely to occur during the summer months, and has been very frequent in the early part of the present year. In addition to this,

diseased meat, such as that of tuberculous animals, may lead to the introduction of serious disease in healthy subjects. So, too, may impure or adulterated milk account for the high mortality among children of tender years, and there can be little doubt that much of the crime which has of late years stained the name of our young colonies is the result of unscrupulous contamination of alcoholic beverages in the public bars of some licensed houses.

Pork, mutton, beef, veal, and such mixtures as brawn, sausages, and meat pies, have all caused poisonous symptoms in England and elsewhere. We have recently seen exposed for sale in Sydney pork pies which, when opened, emitted an offensive odour, and in which the meat was covered with a repulsive yellow slime. Such pies, if eaten, would probably cause gastro-enteritis or other inflammatory disorders.

Stale shell-fish, such as crayfish, crabs, etc., often cause urticaria and gastro-enteritis. Cheese may cause symptoms similar to those observed in meat-poisoning.

Food adulteration consists in (a) the addition of deleterious substances, (b) the extraction of the active principle of the food, with or without addition of foreign matter, and (c) substitution of an inferior article. As examples of the first method may be cited the addition of turmeric to mustard (this is not common in Sydney), or chicory to coffee (very common). Of the second, to good tea is added a quantity of spent tea, or even the leaves of other plants. We have found such additions in tea sold by well-known firms in Sydney, and believe the practice to be fairly common. Rhubarb leaves, cut fine, are sometimes added to genuine tea.

Not long ago, when the Public Health Bill was before the N.S.W. Parliament, a member of the House stated that a large firm made strawberry jam out of pineapple or pumpkin, "and sent youngsters round to pick up the dried figs that fell in the Domain, so that they could use the seeds to represent the seeds of strawberries and raspberries in the pumpkin pulp."

In an interesting article dealing with the sanitation of London bakehouses, Dr. F. J. Waldo (*Jour. San. Inst.*, April, 1894) says: "Bread is peculiarly liable to absorb moisture and gaseous substances. When stored in a badly-arranged bakehouse, therefore, it can hardly escape deterioration. Moreover, when prepared under these conditions, it is liable to be injured at every step of its manufacture. The flour becomes damp, musty and sour, the 'sponge' and dough contaminated by the

sweating arms of the journeyman, while on all sides it is exposed to the risk of sewage and of other noxious emanations." We fear this extract is applicable to many of our Sydney bakehouses at the present time.

Our colonial Health Acts contain provision for dealing with unsound food, and we have no doubt that our Health Boards will eventually put down the sale of such articles. In all the colonies, prosecutions and convictions are of frequent occurrence, but still the frauds go on. In all European countries, in the United States, in Canada and other lands, the sale of foods is regulated by special enactments.

No doubt there is much truth in the adage that "One man's meat is another man's poison," for we find that foods which are consumed largely in one country without ill effects cause severe poisonous symptoms in another. For instance, Reclus tells us that the Aleutians eat food raw and rotten. The Esquimaux, he says, "may be seen swallowing with disgusting avidity rotten fish and the reeking carrion of birds." The Azygotes of the Phillipines are extremely disgusting in their food habits. In Norway decaying cheese, and in Sweden raw salmon which has been buried in the ground for some time, are considered delicacies. The aborigines of Australia eat wild turkeys' eggs, partially hatched; fat grubs roasted, snakes, iguanas, lizards, frogs, young ants and ants' eggs, are dainty morsels to the native black. Among the Zulus, the synonym for heaven is "ubomi," which means "maggoty meat." In Cambodia and Siam, fish is kept until it decays. In China, eggs several months old are enjoyed as a delicacy.

But even in our own country little value is set upon game until it is in a state of putrefaction. We sneer at the Chinese who smacks his lips over roasted puppy, or the Frenchman who revels in frogs and snails, while our mouths water at the prospect of a dish of duck or ham. And yet the pig and the duck are probably the most unclean animals of any used for domestic purposes.

LETTER TO THE EDITOR.

KOCH'S NEW TUBERCULIN.

(To the Editor of the Australasian Medical Gazette.)
SIR,—Seeing a letter in your last journal written by Henry S. Maw, inquiring about the treatment and result of Koch's New Tuberculin, I thought, as I have used the T.R. in 17 cases of all stages of Tuberculosis pulmonum et laryngis, that my experiences might be of some use. As to cure: The patients improved visibly, gained mostly in weight (in some cases as much

as 6 lbs.), the cold sweats disappeared, the appetite increased; in short, some patients felt so much improved that after a two weeks' treatment they returned to work, and in consequence they recommended friends to try the T.R.

Regarding the physical symptoms I could perceive in cases of beginning tuberculosis a decrease of rhonchi and râles, but in cases where the disease extended over a wider area the T.R. has had no marked influence.

With reference to a perfect cure, I was not at all satisfied with the results in my cases.

Re immunity, I have not had sufficient experience to pass an opinion on the subject.

I am, dear Sir,

Yours truly,

M. VON LUKOWICZ, M.D.

North Terrace, Adelaide.

PUBLIC HEALTH.

TYPHOID fever is unusually prevalent in Tasmania. During the first two months of this year 75 cases were reported in Hobart, with seven deaths. These are in addition to 80 cases treated at the General Hospital.

Dr. Gregory Sprott, Health Officer at Hobart, presented his Second Annual Report on the health and sanitary condition of that city to the local Board of Health on March 23. Dr. Sprott stated that the health of the population was decidedly good, and the death-rate about the same as that of 1896.

Tuberculin test was applied recently to some cattle at Warrnambool (Vic.), when, out of thirty head, nine were condemned as tuberculous. All these animals were apparently healthy dairy cattle.

Dr. W. G. Armstrong, who was recently appointed Medical Officer of Health for Sydney and district, took up his duties on April 1.

Beri-Beri is now very prevalent in some parts of Queensland.

The Board of Public Health in Melbourne declares the following boroughs and shires to be affected by the infectious diseases set opposite their names:—
Boroughs of Creswick and Koroit, typhoid fever.
Shires of Bulla, Goulburn, Narracan, North Ovens, and Wyndham, typhoid fever; Glenlyon, scarlet fever; Karkaroc, diphtheria.

Typhoid fever, diphtheria, and measles are prevalent in Melbourne.

There were 60 deaths registered in Hobart during February, but four of these were of persons not usually resident in the district. In the city there were 38 deaths, as compared with 39 during the corresponding month of last year: Males, 16; females, 22. The death rate for the month was 15·60 per 1,000 per annum. The principal causes of death were:—Typhoid fever, 3; diarrhoea, 5; phthisis, 1; tuberculosis, 5; old age, 3; enteritis, 6; heart disease, 1; debility (infantile), 5; and the remainder were of a general nature. Of the 38 deaths, 17 were of infants under one year of age; three were of persons between one and five; 12 between five and sixty-five, and 6 over sixty-five years of age. There were 66 births registered in the district. In the city 44: Males, 21; females 23.

VITAL STATISTICS.

SYDNEY.—The Registrar-General's report on the vital statistics of Sydney and suburbs for the month of February shows that the births numbered 891, viz, 471 of males and 423 of females. There were 46

children born in public institutions, and of these 29 (15 males, 14 females) were illegitimate. The deaths numbered 405, viz., 233 of males and 172 of females. According to the classification of the causes of death, local diseases, with a total of 186 deaths, occasioned 45·93 per cent. of the mortality of the month, and the most prominent in this class were—heart disease, 24; and enteritis, 54. Constitutional diseases came next with 64 deaths (15·80 per cent.), the principal being phthisis, 34. Specific febrile or zymotic diseases, with 54 deaths, contributed 13·33 per cent., of which 10 were due to typhoid fever. Deaths from developmental diseases numbered 31, and from ill-defined causes the number was 35. There were 30 deaths from violence, including 21 accidents, and 7 suicides. The deaths of children under 5 years of age numbered 186, or 45·93 per cent. of the total mortality, and of these 146 were under the age of 1 year. The number of births to every 1000 of the population was 2·17, and of deaths ·99.

MELBOURNE.—During the month of February there were registered in Greater Melbourne 976 births (501 males and 475 females), and 780 deaths (414 males and 366 females). To every 1000 of the population the proportion of births was 28·20, and of deaths 22·54 per annum. Deaths among children under 5 years of age, 340, of which 178 were under 1 year of age. The principal causes of death were—measles, 31; diphtheria, 17; typhoid fever, 34; scarlet fever, 3; cancer, 32; phthisis, 63; pneumonia, 29; enteritis, 119; bronchitis, 10; Bright's disease, 15.

BALLARAT.—During the month of February 103 births were registered in Ballarat and suburbs. There were 96 deaths. The principal causes of death were—typhoid fever, 5; cancer, 6; phthisis, 6; pneumonia, 2; enteritis, 20.

BRISBANE.—During the month of January there were 123 births registered in Brisbane and 66 deaths. The principal causes of death were:—Typhoid fever, 1; dengue fever, 3; whooping cough, 3; remittent fever, 1; cancer, 3; tabes mesenterica, 5; phthisis, 4; apoplexy, 4; enteritis, 10.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the month of February 105 births—54 males and 51 females—were registered in the registration districts of Hobart and Launceston. To every 1,000 of the population of the two districts the proportions of births registered were as follow:—For Hobart, 1·68; for Launceston, 1·56; all, 1·63. Deaths.—The deaths registered in February, in Hobart and Launceston, numbered 115—64 males and 51 females; 35 deaths, or 30·43 per cent. of the whole, took place in public institutions. To every 1,000 of the population of the respective divisions the proportions of deaths registered were as follow:—Hobart, 1·40; Launceston, 2·20; all, 1·79. The deaths under 5 years of age numbered 53, or 46·09 per cent., of which 45 were under 1 year of age.

NEW ZEALAND.—The proportion of deaths registered during February to every 1,000 of the population was 1·23 for Auckland and suburbs, 0·76 for Wellington with suburbs, 0·80 for Christchurch and suburbs, and 0·68 for Dunedin and suburbs. The total births in these four boroughs amounted to 320. The deaths were 156, to which males contributed 89, and females 67. Fifty-eight of the deaths were of children under five years of age; 53 of these were under one year of age. There were 12 deaths from cancer, 7 from phthisis, 7 from pneumonia, 22 from influenza, 4 from typhoid fever, 22 from diarrhoea, 9 from old age, 7 from heart disease, 5 from bronchitis, 8 from enteritis.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

UNIVERSITY OF SYDNEY.

A MEETING of the Senate was held on April 4th, at Selborne Chambers, Phillip Street. The Chancellor (the Hon. Dr. MacLaurin) presided.

The Senate proceeded to the annual election of Vice-Chancellor. It was moved by Mr. Teece, and seconded by the Hon. Dr. Cullen, "That His Honor Judge Backhouse be re-elected to the office of Vice-Chancellor." The motion was carried unanimously.

The standing committees were appointed for the year 1898-9.

On the recommendation of Professor Liversidge, Mr. C. Walker was appointed junior demonstrator in chemistry.

On the recommendation of Professor Stuart, Dr. H. V. C. Hinder was appointed surgical tutor in the room of Dr. M'Allister, resigned.

Reports were received from the examiners in the faculties of art, law, medicine, and science, reporting the results of the recent examinations. These were adopted.

Launceston Hospital, Tas.—The Staff Question.—The Hospital Board have agreed to meet the members of the local branch of the British Medical Association in conference with reference to their proposal for a change in the system of management at the hospital. It has been left with the Chairman of the Board to fix a date. One of the points in favour of a change was clearly brought out at the meeting of the Board. A motion was carried placing on record the high appreciation of the services rendered by the retiring surgeon-superintendent, when Dr. Drake, in returning thanks, acknowledged the professional experience he had gained in the institution. Well, Dr. Drake, with his experience gained while in Launceston, is about to leave, and the benefit of the experience is lost to the community, whereas, had the system of management advocated by the Medical Association been in vogue, that experience would have been shared in by most of the local medicos, and the people generally would have received the benefit.

At a special meeting of the Hospital Board on March 10, 1898, Dr. McArthur has been appointed house surgeon in place of Dr. Ramsay, who was appointed Surgeon-Superintendent *vice* Dr. Drake, resigned. There were 13 applicants. Dr. McArthur has been acting as *locum tenens* for Dr. Ramsay.

MEDICAL NOTES.

PRESENTATIONS TO MEDICAL MEN.

Dr. Joseph Park, of Helensburgh, N.S.W., has been entertained at a banquet by the people of Helensburgh, and has been the recipient of an illuminated address. The presentation was made by Mr. Nicholson, M.P.

Dr. W. H. O'Neill, late of Narrandera, N.S.W., was entertained at a banquet when leaving the district, he was also presented with a handsome gold watch and chain. The watch bore a suitable inscription.

Dr. F. M. Blackwood, of Summerhill, near Sydney, has been presented with a beautifully illuminated address by the Sterling Lodge, No. 18, I.O.O.F.

Dr. F. J. Drake, the retiring surgeon superintendent of the general Hospital, Launceston, Tasmania, has been presented with a number of medical works by the medical staff, and a handsome spirit lamp from the present and past nurses. The presentations were

made at a social given to the Doctor at the Hospital on March 25th.

Dr. V. Black, warden of Southern Cross, W. A., whilst driving in Golden Valley, met with a serious accident. A gun which he was carrying was loaded, but not cocked. It slipped off his knee, striking the guard rails of the vehicle, and went off. The charge shattered Dr. Black's left hand.

MILITARY APPOINTMENTS, ETC.

New Zealand Defence Forces.—His Excellency the Governor has been pleased to approve of the following:—Taranaki Rifle Volunteers: Hugh Allan McClelland to be Surgeon-Captain. General Medical List, N.Z. Volunteers: Surgeon-Captain William Henry Hosking to be Surgeon-Major; Surgeon-Captain William Johnston Will to be Surgeon-Major; Surgeon-Captain Richard Bowen Hogg, of Timaru, N.Z., to be Surgeon-Major. Marlborough Mounted Rifle Volunteers: Surgeon-Captain Daniel Mathewson Navin has resigned his commission.

Victorian Defence Forces.—His Excellency the Governor has been pleased to approve of the following:—Retirement: Surgeon-Captain William Francis Sweetman, Reserve of Officers, Medical Staff, Victorian Mounted Rifles, has retired. Transfers—Reserve of Officers, Medical Staff, Militia: Surgeon-Major Thomas Cuthbertson Hope, from the Fixed Establishment, Medical Staff, Militia, to be Surgeon-Major; Fixed Establishment, Medical Staff, Militia: Surgeon-Captain John Small, from the Reserve of Officers, Medical Staff, Militia, to be Surgeon-Captain. Promotion—Fixed Establishment, Medical Staff, Militia: Surgeon-Captain William Lowell Mullen, to be Surgeon-Major. Confirmation of Commissions—Medical Staff, Victorian Mounted Rifles: Confirmation of commissions of the undermentioned Surgeon-Captains—Surgeon-Captain Charles Crawford Macknight, Surgeon-Captain Percy Herbert Liddle. Resignation—Victorian Rangers, Medical Staff: Surgeon-Captain James Alexander Reid.

Queensland Defence Forces.—Surgeon-Lieutenant-Colonel J. Ahearne has been granted six months' leave of absence.

New South Wales Defence Forces.—Surgeon-Lieutenant C. A. Edwards has been attached to the 2nd Infantry Regiment, in place of Surgeon-Captain Jarvie Hood, transferred to the Reserve of Officers; Honorary Surgeon-Lieutenant H. E. Lee has been appointed to the 1st Australian Horse; Honorary Surgeon-Lieutenant J. B. Crabbe to 5th (Union Volunteer) Infantry Regiment (Scottish Rifles); and Honorary Surgeon-Lieutenant G. L. Mullins to 5th (Union Volunteers) Infantry Regiment (Irish Rifles).

OBITUARY.

SAMUEL WILLIAM BRIERLY, L. et L. Mid., R.C.S. and R.C.P. Edin., 1882, formerly of Melbourne, died suddenly in the Adelaide Hospital on April 3. Dr. Brierly was formerly Deputy Medical Superintendent at the Beechworth and Yarra Bend Lunatic Asylums, Vic.

JOSEPH EDMUND ORAM HENRY, M.R., Ch.M. Syd. 1894, died at Walgett, N.S.W., from typhoid fever, on March 29. Dr. Henry was formerly Resident Medical Officer at the Sydney Hospital.

ROBERT FAWELL HUDSON, L.F.P.S. Glas., M.D. St. And. 1887, M.D. Melb. (a.e.g.), 1860, died at Ballarat on March 27. The deceased was born at Salford, England, in 1834, and was, therefore, 64 years of age at

the time of his death. Having taken the diploma of L.F.P.S. Glas., he subsequently graduated as M.D. at St. Andrews. About the end of the fifties he arrived in Victoria, and was appointed a resident physician of the Melbourne Hospital. In 1862 he went to Ballarat, where he resided for 35 years. For many years he was honorary medical officer to the Ballarat Hospital, and after his retirement honorary consulting surgeon. He was for years chairman of directors of the Ballarat Banking Company, the Ballarat Gas Company, and the Ballarat Building Society, and was also a trustee of the Ballarat Club, and vice-president of the Australian Club in Melbourne. Dr. Hudson was the owner of extensive property in New South Wales. Several years ago Dr. Hudson paid a visit to the old country, principally to recuperate his health. His final illness was only of a few days' duration, and death was due to inflammation of the heart. During his long residence in Ballarat Dr. Hudson made many warm friends, who deeply regret his death.

MEDICO-LEGAL.

A WIDOW in Melbourne named Harriet Kenise, has been fined £10, or in default distress or imprisonment, for neglecting to provide medical aid for her son, aged five years and a half, who is suffering from a diseased knee joint. Defendant took the child out of the Children's Hospital, and removed the splints. The defence was she had no faith in doctors.

CHANGE OF ADDRESS, &c.

ALSO, Dr. C. J., late of Melbourne, has succeeded to the practice of Dr. H. G. H. Naylor, at 66 Macquarie-street, Hobart.

BOOTH, Dr. Jas., formerly of Brisbane, has succeeded to Dr. A. G. H. Colquhoun's practice at Rupanyup, Vic.

BOWKER, Dr. C. S., has left West Maitland, N.S.W.

BREWIS, Dr., of Hamilton, N.Z., has gone on a trip to Europe per R.M.S. "Austral."

BRONTE, Dr. A., has removed from Wanganni to Levin (Wellington), N.Z.

BROWNLESS, Dr. A. C., has returned from Western Australia, and has resumed practice at Elizabeth Street, Hyde Park, Sydney.

CAMPBELL, Dr. D. A., has commenced practice at Rosedale, Vic.

CHAPPLE, Dr. W. A., of Wellington, N.Z., has returned from his trip to Europe.

COLLINS, Dr. M. J., has left Balmain (Sydney) for Delorsaine, Tas.

CONLON, Dr. W. A., formerly at the Children's Hospital, Glebe, Sydney, has commenced practice at Kumara (Westland), N.Z.

CORY, Dr. G. C., has removed from Junee to Bingara, N.S.W.

COX, Dr. F. H., of Goodooga, has been appointed Medical Officer to the Hospital, Walgett, N.S.W.

DAVIDSON, Dr. G., late of Gayndah, has become a partner with Drs. Voss and Hawkes, of Rockhampton, Q.

DRAKE, Dr. F. J., recently Surgeon-Superintendent of the General Hospital, Launceston, Tas., has commenced private practice at Hobart.

FLASHMAN, Dr. J. F., has been transferred from the Hospital for the Insane at Parramatta, N.S.W., to the Callan Park Hospital for the Insane, Sydney.

GILL, Dr. J. Macdonald, has moved to 18 College-street, Hyde Park, Sydney.

GRAY, Dr. J., has commenced practice at Quirindi, N.S.W., in conjunction with Dr. R. Mead.

FOLLEY, Dr. J. E., has commenced practice at Cowra, N.S.W.

FOX, Dr. G., has removed from Levuka to Suva, Fiji.

HARR, Dr. F. W. E., has resigned his appointment as Resident Medical Superintendent at the Charters Towers Hospital, Q., and Dr. E. B. Huxtable has been appointed in his place.

HIGGINS, Dr. F. C., late of The Coast Hospital, Sydney, has been appointed Medical Officer to the Hospital, Walgett, N.S.W.

JOHNSON, E. ANGUS, has removed from the Children's Hospital, North Adelaide, S.A., to St. Catherine's, Prospect, S.A.

MACKY, Dr. Jas., of the Glebe (Sydney), has gone on a trip to Europe per R.M.S. "Austral."

MARTIN, Dr. J., has removed from Paddington, W.A., to Black Flag, W.A.

MCILROY, Dr. A. J., has removed from Milton (Otago) to Brunerton (Westlands), N.Z.

MILLARD, Dr. R. J., has returned from his trip to England. He has been transferred from Callan Park, (Sydney) Hospital for the Insane to the Kenmore Hospital for Insane, Goulburn, N.S.W.

MONEY, Dr. P. F., late of New Zealand, has settled at Levuka, Fiji.

MORGAN, Dr. C. W., has left Burwood for Pambula, N.S.W.

MORRIS, Dr. W., has removed from Pleasant Point to Little River (Canterbury), N.Z.

MUGLSTON, Dr. H. B., has removed from Springwood to Canowindra, N.S.W.

MURRAY-GIBBS, Dr. J., has disposed of his practice at Border Town, S.A., to Dr. R. McDougal, late of Gladstone, S.A.

MURRAY, Dr. G. L., lately Medical Officer of the Hospital at Bingara, N.S.W., has been appointed to a corresponding post at the Mount Morgan Hospital, Q.

NEWTON, Dr. Alice, has commenced practice at Stanmore-road, Stanmore, near Sydney.

OLDMEADOW, Dr., of Tasmania, has gone on a trip to Europe per R.M.S. "Austral."

PENNY, Dr. H. J., late of Geraldton, W.A., has settled at New Norfolk, Tas.

PORTER, Dr. A. H., has removed from Tauranga to Waikato, N.Z.

PRATT, Dr. E. H. L., has removed from Glebe Point to Parramatta.

RAMEAY, Dr. J. E., has removed from Southern Cross to Peak Hill, W.A.

RYAN, Dr. E., of Nhill, Vic., has obtained twelve months' leave of absence. He intends to visit Europe.

SMITH, Dr. E. Temple, has commenced practice at Mt. Morgan, Q., in conjunction with Dr. Arthur C. Mackenzie.

SWANSTON, Dr. C., has removed from Kanowna to Coolgardie, W. A.

VEECH, Dr. M., late of the Sydney Hospital, has been appointed Third Medical Officer of the U.F.S. Dispensary, Balmain (Sydney), *vice* Dr. M. J. Collins, resigned.

WALSH, Dr. W. Butler, of Melbourne, has gone to Europe for a trip, per R.M.S. "Austral."

WALTER, Dr. H., has removed from Perth to Fremantle, W.A.

MEDICAL APPOINTMENTS.

The following appointments are announced:—

Allan, E. B., M.D., &c., to be Public Vaccinator at Daylesford, Vic., *vice* Dr. T. R. H. Willis, resigned.

Andrew, J. E., L.R.C.P., &c., to be Officer of Health for the city of Hawthorn, Vic., *vice* Dr. T. O. F. Alsop, absent on leave.

Bertram, T. B., M.B. Glas., &c., to be Visiting Surgeon and Dispenser, Coonamble Gaol, N.S.W., *vice* Dr. E. O. Newland, resigned.

Binnett, P. F. W., L.R.C.P. Ed., &c., to be Acting Government Medical Officer and Vaccinator for the district of Molong, N.S.W., *vice* Dr. H. Browne, absent on leave.

Booth, Jas., L.R.C.P., &c., to be Officer of Health and Public Vaccinator for the Shire of Dunmunkle, East Riding, Vic., *vice* Dr. A. G. H. Colquhoun, resigned.

Olson, J. O., M.B., M.S., M.D. Edin., to be a Member of the Board of Examiners for the city of Dunedin, N.Z.

Cuscaden, G., L.R.C.P. and S., &c., to be Certifying Medical Practitioner for the Factories and Shops Acts for Port Melbourne, Vic., *vice* Dr. W. S. Smythe, resigned.

Cox, F. H., M.B. Syd., &c., to be Medical Officer to the Hospital, Walgett, N.S.W.

Campbell, D. A., M.B., &c., to be Officer of Health for the Shire of Rosedale, Rosedale and Denison Ridings, Vic., *vice* Dr. A. Macdonald, resigned.

Cross, W. J., M.D., to be Public Vaccinator at Horsham, Vic., *vice* Dr. G. J. Young, resigned.

Cook, P. R., M.B., Ch.B., Univ. N.Z., to be a Public Vaccinator for district of Oxford, N.Z.

Finlay, S., F.R.C.S. Irel., to be Government Medical Officer and Vaccinator for district of Dungog, N.S.W., *vice* Dr. A. W. McMath, resigned.

Good, J. E., M.B., O.M. Edin., to be a Public Vaccinator for S.A.

Harvey, R. R., M.B. Melb. &c., to be Health Officer for Norseman, W.A., *vice* Dr. A. Goode, resigned.

Hawkes, C. S., M.R.C.S. Eng., &c., to be Acting Medical Superintendent of Quarantine, Acting Health and Medical Officer, Acting Visiting Surgeon to the Prison, and Acting Visiting Surgeon to the Lock Hospital, at Rockhampton, during the absence on leave of Dr. F. H. V. Voss.

Higgins, F. C., M.B. Syd., &c., to be Medical Officer of the Hospital at Walgett, N.S.W.

Huxtable, R. B., M.B., O.M. Edin., to be Resident Medical Superintendent, the Hospital, Charters Towers, Q., *vice* Dr. F. W. O. Hare, resigned.

Hay, J. B., M.B., &c., to be Officer of Health and Public Vaccinator for the Shire of Heytesbury, Vic., *vice* Dr. G. M. Reid, resigned.

James, Philip, F.R.C.S. Eng., to be Hon. Surgeon to the Wellington Hospital, N.Z.

Lawson, G. L. L., M.R.C.S. Eng., L.R.C.P. Lond., D.P.H., to be Health Officer for Mullerwa, W.A.

MacMaster, John, M.B., O.M. Edin., &c., to be Government Medical Officer and Vaccinator for the district of Merriwa, N.S.W., *vice* Dr. A. G. O'Flanagan, resigned.

McKee, J. O., L.R.C.P., &c., to be Officer of Health and Public Vaccinator for the Borough of Eaglehawk, Vic., *vice* the late Dr. J. J. Thom.

McGowan, A. S., M.B., to be Junior Assistant Surgeon to the Ballarat Hospital, Vic., *vice* Dr. Oberhall, resigned.

McIlroy, A. J., M.B., O.M. Edin., to be Public Vaccinator for Brunerton, N.Z.

Matthews, T., L.R.C.P. Ed., &c., to be Government Medical Officer and Vaccinator for the districts of Shoalhaven, Nowra, and Terara, N.S.W., *vice* the late Dr. J. B. Brereton.

Montgomery, J. P., M.B., &c., to be Officer of Health for the Shire of Rosedale, Toongabbie Riding, Vic.

Martin, Jas., L.R.C.P., &c., to be Health Officer for Black Flag, W.A.

Marka, E. G. K., M.D., to be Medical Officer at Herberton, Q., *vice* Dr. L. G. A. MacDonnell.

Murray, G. L., M.B. Syd., &c., to be Medical Officer at the Mount Morgan Hospital, Q.

Morris, W., Phys. and Surg., Univ. Erlangen, to be Public Vaccinator for Little River, N.Z.

Pitcher, S. W., L.R.C.P., &c., to be Public Vaccinator at Kingston, Vic., *vice* Dr. W. Corry, resigned.

Player, C. B., M.B., &c., to be Officer of Health for Shire of Melton, East Riding, Vic., *vice* Dr. N. O. A. Vance, resigned.

Roughan, J. A., M.B., B.U.I., &c., to be Resident Medical Officer for Williams district, also to be Public Vaccinator for the urban, suburban, and rural districts of Williams, W.A.

Spence, H., M.B., &c., to be Officer of Health for the city of Footscray, and for the Shire of Braybrook, Vic., during the absence of Dr. C. L. McCarthy, on leave.

Spence, H., M.B., to be Acting Public Vaccinator at Footscray, Vic., *vice* Dr. C. L. McCarthy, absent on leave.

Smith, E. Temple, M.B., B.Ch., B.A.O., Roy. Univ. Irel.; M.R.C.S. Eng., L.R.C.P. Lond., to be an Honorary Medical Officer to the Hospital, Mount Morgan, Q.

Simpson, D., M.B., &c., to be Officer of Health for Shire of Fern Tree Gully, Vic., *vice* Dr. W. J. Craig, resigned.

Teare, J., M.B., &c., Victoria Univ., to be a Public Vaccinator for the district of Wellington, N.Z.

MEDICAL RESIGNATIONS.

The following resignations are announced :—
 Chenhall, Dr., as Junior Assistant Surgeon to the Ballarat Hospital, Vic.
 Craig, Dr. W. J., as Officer of Health for Shire of Fern Tree Gully, Vic.
 Colquhoun, Dr. A. G. H., as Officer of Health and Public Vaccinator for Donmunkle Shire, Vic.
 Corry, Dr. W., as Public Vaccinator at Kingston, Vic.
 Goode, Dr. A., as Health Officer for Norseman, W.A.
 Hare, Dr. F. W. E., as Resident Medical Superintendent, the Hospital, Charters Towers, Q.
 Macdonald, Dr. A., as Officer of Health, Rosedale Shire, Vic.
 McMath, Dr. A. W., as Government Medical Officer and Vaccinator, Dungog, N.S.W.
 Newland, Dr. R. O., as Visiting Surgeon and Dispenser, Coonamble Gaol, N.S.W.
 O'Flanagan, Dr. A. J., as Government Medical Officer and Vaccinator, Merriwa, N.S.W.
 Reid, Dr. G. M., as Officer of Health and Public Vaccinator for Heytesbury Shire, Vic.
 Smythe, Dr. W. S., as Certifying Medical Practitioner, Factories and Shops Act, Port Melbourne, Vic.
 Vance, Dr. N. C. A., as Officer of Health, Melton Shire, Vic.
 Willis, Dr. T. R. H., as Public Vaccinator at Dinglesford, Vic.
 Young, Dr. G. J., as Public Vaccinator at Horsham, Vic.

REVIEWS.

ABOUT CHILDREN: SIX LECTURES GIVEN TO THE NURSES IN THE TRAINING SCHOOL OF THE CLEVELAND GENERAL HOSPITAL. By Samuel W. Kelly, M.D., Professor of Diseases of Children in the Cleveland College of Physicians and Surgeons; Pediatricist to the Cleveland General Hospital; Consulting Physician to the Cleveland City Hospital, &c., &c. Cleveland, O. (U.S.A.): The Medical Gazette Publishing Co., 1897.

The perusal of this volume has given us the deepest pleasure. The gifted editor of the *Cleveland Medical Gazette* having delivered these lectures to the nurses of the General Hospital, has been induced to print them in the hope that they might be useful to other nurses, to intelligent parents, even to medical students and practitioners. Every nurse who seeks to make herself proficient in her daily duties should study this book carefully. The graceful and easy style of the author is impressive, and when we have finished the book our only regret is that Dr. Kelly has not seen fit to extend the course, and give us a larger volume. The only improvement we can suggest is the addition of a few illustrations in the second edition, which will undoubtedly be called for before long. We are particularly impressed with Chapter VI., which deals with Artificial Feeding, and some general remarks on the habits, dispositions, and management of children.

HYGIENE AND PUBLIC HEALTH. By Louis C. Parkes, M.D., D.P.H. Lond. Univ.; Fellow of the Sanitary Institute, and Member of the Board of Examiners; Lecturer on Public Health at St. George's Hospital Medical School; Medical Officer of Health and Public Analyst for the Parish of Chelsea. Fifth edition. Pp. 570, cr. 8vo. Price, 10s. 6d. London: H. K. Lewis, 1897.

This edition of a well-known work is up-to-date in all its chapters. Chapter I. treats of water, its sources, distribution, purification, and examination. Chapter II. describes fully the methods of collection, removal and disposal of excretal and other refuse. Other chapters deal with Air, Ventilation, Climate and Meteorology, Soils and Building Sites, Foods, Clothing, Communicable Diseases, &c. There is also an excellent chapter on Statistics. The volume is well illustrated. Such a book as this should be in the hands of every practitioner in the country. It is cheap, handy, and reliable.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards :—

NEW SOUTH WALES.

Thomas, Julia Carlile, M.B. Univ. Sydney 1898.
 Newton, Alice Sarah, M.B. Univ. Sydney 1898.
 Gray, James, M.B. & Mast. Surg. Univ. Edin. 1894.
 Campbell, Alfred, Mem. R. Coll. Surg. Eng. 1897; Lic. R. Coll. Phys. Lond. 1897.
 Rosenfeld, Reuben Laman, M.B. & B.S. Univ. Melb. 1897.

TASMANIA.

Penny, Henry James, L.R.C.S.I. 1876; L.K.Q.C.P.I. 1877.
 Alsop, Thomas Osmond Fabian, M.R.C.S. Eng. 1874; M.B., C.M. Edin. 1874.
 Collica, Michael Joseph, L.R.C.S. Edin. 1882.
 Kiermader, Herbert Byrne, L.R.C.S. Edin. 1876; L.R.C.P. Edin. 1880.

VICTORIA.

McDougall Richard, M.B. & Ch.M. 1873; M.D. Glas. 1882.
 Mackenzie, Andrew Hardie, M.B. Melb. 1897.
 McPhee, Robert George, M.B. Melb. 1897.
 Campbell, Donald Albert, M.B. Melb. 1897.
 South, Harold, M.B. Melb. 1897.
 Chapple, Frederic John, M.B. Melb. 1897.
 Rosenfeld, Reuben Laman, M.B. & Ch.B. Melb. 1897.

NEW ZEALAND.

The following applicants for registration have deposited the evidence of qualification as required by law :—

Riley, Arthur, M.B. Bac. Surg. Durh.; M.R.C.S. Eng.; L.R.C.P. Lond.
 Home, George, M.D., C.M. Edin.; D.P.H., R.C.P. & S. Eng.
 Conlon, William Aloystus, M.B.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

HAY.—On the 14th March, at Cobden, Victoria, the wife of J. R. Hay, M.B. and C.M., of a son (stillborn).
 HIRSCHFELD.—On the 24th March, at Wickham Terrace, Brisbane, the wife of Dr. Hirschfeld, of a son.
 KIRKLAND.—On the 26th March, at Harnsworth, Croydon, N.S.W., the wife of Dr. Speirs Kirkland, of a daughter.
 WOLFE.—On the 19th March, at Stonehenge, Richmond, Vic., the wife of J. R. Wolfe, M.D., of a daughter.

MARRIAGES.

FREYER—HANN.—On the 19th March, 1898, at Christ Church, Tenterfield, N.S.W., by the Rev. H. Granville Smyth, J. K. Freyer, M.A., L.R.C.P., L.R.C.S. and L.M. (Ireland), third son of S. F. Freyer, Sclerna House, Clifden, Galway, Ireland, to Anna Madeleine, only daughter of P. Hann, Wagga Wagga, N.S.W.
 GLEDDE—BLACKWELL.—On the 2nd March, at St. John's Church, Parramatta, N.S.W., by the Ven. Archdeacon Gunther, M.A., Alfred Maitland Gledde, M.D., of 22 College Street, Hyde Park, Sydney, to Annie Florence, widow of the late R. F. Blackwell, M.D., of West Maitland, N.S.W.
 IRWIN—KNAGGS.—On the 13th April, 1898, at St. James' Church, Sydney, by the Rev. H. Maclean, William Irwin, M.B., M.S. (Glasgow), of Singleton, N.S.W., only son of the late Wm. Irwin M.D., of Newcastle, to Phebe Caroline, eldest daughter of Samuel T. Knags, M.D., &c., of Sydney.
 MACKNIGHT—SIMPSON.—On the 28th January, at Nowranie Station, N.S.W., by the Rev. John Dykes, Dr. Conway M. Macknight, second son of the late C. H. Macknight, of Dummore, Port Fairy, to Eliza, third daughter of the late G. F. Simpson, of Nowranie, Jerilderie.
 SCOTT—ASCHMAN.—On the 25th February, at St. Luke's Church, Christchurch, N.Z., by the Ven. Archdeacon Lingard, Edward Henry Scott, M.D., Ch.M., second son of the late Henry Scott, Registrar-General and Master of Titles, Brisbane, to Louise Mary, second daughter of the late John Anakis Aschman, Esq., Lyttelton, N.Z.

DEATHS.

HENRY.—On the 29th March, at Walgett, N.S.W., Joseph Edmund Oram Henry, M.B., Ch.M., third son of the late James Henry, of Sydney, and brother of Drs. T. J. Henry, of Grafton, and A. G. Henry, of Callan Park.
 HUDSON.—On the 27th March, at Ballarat, Vic., R. F. Hudson, M.D., aged 64 years.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS.

By WALTER FELL, M.D. OXON., WELLINGTON, N.Z.

READ AT THE SECOND ANNUAL MEETING OF THE NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION, HELD IN WELLINGTON, MARCH 15th, 16th, 17th, 18th, and 19th, 1898.

I AM here before you to-night to offer, on behalf of the Wellington section, a most hearty welcome to all those who, at considerable expenditure of time and money, have come here from all parts of New Zealand to join in our discussions, and help to forward the cause of medical science, and cement the brotherhood of medical practitioners. Though, to many, it for a long time seemed unwise that we should sink our individuality, and merge ourselves in the great parent body, the British Medical Association, I have myself for years advocated the change, and I think there are few now in New Zealand who do not recognise the wisdom of it. This is an age of great combinations, and the medical profession can only exert its due influence and obtain its just rights by combining, thus wielding the almost irresistible power which a large and united body of earnest men has at all times at its command. As representing the now important New Zealand branch of the British Medical Association, I feel deeply the responsibility that has been laid upon my shoulders. Gentlemen, I thank you for the honor you have done me, and I beg you to extend your forbearance to my address on this occasion. At the first meeting of the New Zealand branch, held in Nelson last year, our President, rightly and in well-chosen terms, introduced to us some broad ethical questions. This time I propose to address you on the subject of a special disease, for I think it is better that our Presidential Addresses should alternate between the ethical and the more practical subjects.

My subject to night is the malignant new growths, or as I shall call it for brevity, "Cancer"—cancer as understood by the public, and from the broadest point of view, including all the malignant neoplasms; the sarcomata, the epitheliomata, and the carcinomata or cancer proper. Cholera is a name of fearful import in the East, consumption is a word which spells "death" in the ears of many; but not even consumption is such a name of terror to the

general public in these islands as cancer, and therefore I think we may with some profit review from time to time our knowledge of this dread disease; though I would begin by warning you that I have no new discoveries to announce. There is a wide-spread, I may say universal, belief among the people of New Zealand that cancer is increasing; we all of us hear someone say so almost every day of our lives. Is this popular belief true or false? One might suppose that the Registrar-General's statistics would furnish an easy answer, but they do not, for many possible fallacies have to be considered. In the first place our available statistics only cover a very short space of time, and are on that account, if for no other reason, very misleading. What we want to study is not the statistics of fifteen years but of fifteen hundred years, or better still, of the last three thousand years; then I think we shall see that cancer, as a common cause of death, is a comparatively recent development. I have devoted a good deal of time on different occasions to a study of the diseases that vexed humanity in the dawn of civilisation and during the last twenty years much has been learnt of the systems of medicine in vogue in the ancient Asiatic Empires, which were the cradle of the world. The sacred books of India, the Charuka and the Susruta, have only lately been known and read; they were prepared from the tenth to the third century B.C., and may be considered the most ancient existing records of the science and art of the Hindus, and therefore of the world.

Egypt derived her learning from the mysterious wisdom of the East, and the Western Aryan race which constituted the Hellenic nation, derived its knowledge from the same source, filtered in many cases through, and influenced by the Egyptian mind. A. T. L. Wise says, "Greece was really not the parent but the nurse of the arts," and yet, after all, it is to Greece that we have to look for most of our authentic information with regard to the diseases of the ancients. I need not detain you with my reasons, but will ask you to accept as a fact, that what I have read of the 72 books written by the seven doctors of the family of Hippocrates has proved to me that cancer, if it existed at all in ancient Greece, was a rare and unimportant disease. It is true Hippocrates speaks of a disease which he calls *καρκίνος*, and says of it: "It is better not to apply any treatment in the case of hidden or deep seated

cancer, for if treated the patients die quickly, but if not treated they hold out for a long while," and Galen, commenting on this, says: "*Aliam vero quæ fit per sectionem vel ustionem (quæ sola sunt remedia cancerorum) consulit ut in canceris occultis non adhibeamus*"; and further he adds, "when they are external, if we can remove them *cum radicibus ipsis*, we may do so." But it is far from certain that *karkivos* means the disease we call cancer. The Sanskrit "Karka," which is the root of the Greek word *καρκίος*, is believed to mean an eroding ulcer of any kind. The Latin word "cancer" is undoubtedly applied to a virulent ulcer, and probably as its first meaning is a "crab," its application to an ulcer was justified by supposing the ulcer to have roots or claws. And moreover, if we allow that carcinomata, though undoubtedly rare, did occur in the world at some period before Christ, there is little reason to doubt that the more rapid and more malignant sarcomata did not. The admirable surgery of Celsus, the surgery of the first century of the Christian era, does not describe cancer with sufficient clearness to assure us that he distinguished it from an ulcer. In the Bible we have leprosy, epilepsy, insanity, palsy, and blindness, all singled out for special mention, doubtless because of their conspicuous nature; but cancer, a disease just as terrible, and appealing as strongly to the imagination, is nowhere alluded to. It is impossible to believe that cancer was 2000 years ago the common and formidable complaint which we now have to deal with. Moreover, if time permitted, which it does not, I think I could prove that even in the middle ages cancer was a rare and unimportant disease; it now, in New Zealand alone, claims a death rate of about 380 per annum, or more than one for every day of the year. This disease, which was scarcely spoken of or recognised by the ancients, and which was of little account in the middle ages, is now one of our most terrible afflictions, and this increase has taken place recently, almost within the last 100 years. After considering all the fallacies to which they are liable, our New Zealand statistics, short as is the period they cover, show a decided increase in the deaths from cancer. In the five years from 1880 to 1884 the deaths were 781. In the five years 1890 to 1894 they were 1,637, or considerably more than double, while the population in the meantime had increased by

less than one-third. In 1881 the deaths from cancer per 10,000 living were 2·69. In 1895 they were 5·53. But it must be remembered that the population had during this period increased, not in numbers only, but in age, and as cancer is a disease of mature life, an increase in the number of deaths from this cause was to be expected. To obtain more correct results we must compare the deaths at groups of ages with the number living at corresponding ages. The Registrar-General has kindly prepared for me a table (see p. 187), which clearly sets before you the annual death rate from cancer in New Zealand per 10,000 living at each age period:—

As will be seen, the male rates show a continuous and astonishing increase; but the proportion having been worked out, only for particular years, census years being chosen, the numbers are necessarily small, and the results in some cases deceptive. I should therefore prefer to rely on the following table prepared by Mr. Leslie, the assistant Actuary of the Government Life Insurance Department:—

DEATHS FROM CANCER IN NEW ZEALAND IN GROUPS OF YEARS.

Ages.	Males.			Females.		
	1882-6	1887-91	1892-6	1882-6	1887-91	1892-6
20-30	12	15	14	3	14	13
30-40	22	27	38	52	69	62
40-50	115	115	126	139	132	171
50-60	150	226	342	120	206	273
60-70	110	213	321	79	138	183
70-80	44	90	141	35	61	78
Totals..	453	686	983	428	620	780

MEAN ANNUAL RATE FROM CANCER IN NEW ZEALAND PER 10,000 LIVING AT EACH AGE PERIOD, AND IN THREE GROUPS OF YEARS.

Ages.	Males.			Females.		
	1882-6.	1887-91.	1892-6.	1882-6.	1887-91.	1892-6.
30-40	1·060	1·274	1·695	3·533	4·301	3·845
40-50	6·407	6·452	7·000	12·948	10·721	12·791
50-60	16·066	17·810	23·183	23·217	28·447	29·303
60-70	30·762	41·564	43·085	33·165	43·224	41·158
70-80	40·300	56·068	61·967	41·396	49·421	47·164

DEATHS FROM CANCER.

Year.	30 to 40 Years		40 to 50.		50 to 60.		60 to 70.		Totals—All Ages.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1881	4	11	19	18	16	18	13	17	61	72
1886	7	7	22	27	41	31	27	17	116	98
1887	8	9	26	21	40	46	31	19	127	111
1888	3	18	25	26	45	40	43	24	136	127
1889	2	17	21	21	43	31	45	29	144	116
1890	7	13	25	33	49	44	48	31	156	139
1891	7	12	18	31	49	45	46	35	154	141
1892	11	11	22	24	61	44	51	34	173	134
1893	5	10	21	33	62	53	63	30	188	144
1894	12	14	24	44	85	52	78	31	240	168
1895	7	10	34	38	67	58	58	43	208	175
1896	3	17	25	32	67	66	71	45	205	184

PROPORTION PER 10,000 LIVING AT EACH AGE PERIOD.

Year.	30 to 40 Years.		40 to 50 Years.		50 to 60 Years.		60 to 70 Years.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1881	0.98	3.98	5.58	9.80	11.10	22.57	22.86	43.78
1886	1.66	2.30	5.90	11.50	19.14	26.23	33.63	32.08
1891	1.65	3.64	5.17	12.27	17.68	23.00	39.63	49.77
1896	0.65	4.30	6.79	11.60	22.00	32.80	41.86	44.74

Or, in order to compare better with the English tables, we may take the following age periods:—

DEATHS FROM CANCER.

Males.				Females.		
Ages.	1882-6.	1887-91.	1892-6.	1882-6.	1887-91.	1892-6.
35-45	54	67	73	91	103	105
45-55	158	177	247	151	176	233
55-65	130	239	367	94	172	354
Totals	342	483	687	336	451	592

DEATH RATE PER 10,000 LIVING AT EACH AGE PERIOD.

Males.				Females.		
Ages.	1882-6.	1887-91	1892-6	1882-6.	1887-91.	1892-96
35-45	2.739	3.483	3.571	6.936	7.314	6.716
45-55	11.146	10.743	14.807	19.306	17.360	19.928
55-65	23.106	29.070	32.641	27.641	34.302	38.318

From this table, prepared from the statistics of three groups of 5 years each, the same general result is seen to obtain—a steady increase in the proportion of male deaths, while the female death rate shews a considerable but rather erratic increase.

This difference, I think, admits of an explanation which has escaped notice. From the ages 40 to 50 females are most prone to malignant disease of the breast and os uteri, and during that period the mortality returns for females show only a slight increase. This, I think, is a proof not that there is only a slight increase in cancer cases at that age period, but of the success which now attends operations on the breast and uterus, which has largely reduced the mortality in these cases. On the other hand, the cancerous affections of males are in a much larger proportion internal and inoperable, and, consequently, there are fewer cases cured by operation, and more deaths. English actuaries are in the habit of saying that the increase of cancer is apparent and not real, and is due to improvement in diagnosis and more careful certification of death. I venture to combat this theory, and to say the increase is real, and would be much greater than statistics show, were it not for the number of cases cured by

operation. This is, perhaps, a bold statement, and I admit that standing alone, as a mere expression of opinion, it is perfectly valueless; but I have endeavoured to procure some figures in support of my statement, and these I now offer to you. Dr. Ewart has kindly analysed for me the cancer operations in the Wellington Hospital during the last five years. From this it appears there have been 54 cases operated upon, and of these 22 left the hospital cured for the time being and have not been heard of since, so we may fairly assume the majority of these are, so far, well and free from recurrence. Now these, if not operated on, would have helped to swell the death-rate ere now. Mr. Bryant, at a recent discussion on cancer, said he had operated in private on 72 cases of cancer; of these, 44 per cent. lived for more than three years from the date of operation, and of these, one-half lived for five years and upwards. Of the cases of carcinoma of the breast that I myself have operated on during the last ten years, I can only give particulars of seven. Of these seven, three are too recent to reckon with, they all having been operated on within the year. All are well, however, up to now. Of the other four, two are dead and two are alive and well, and as it is now seven and eight years since they were operated upon, I may fairly consider them cured. I could quote figures from many surgeons' statistics to show that a similar average of cures is being obtained by thousands of surgeons all over the world, and it seems to me evident that the cancer mortality is very largely diminished thereby. It may seem a rash thing for me to try and point out a fatal error in the conclusions drawn by such well-known masters of statistics as Dr. Newsholme and Mr. George King, the Hon. Sec. of the Institute of Actuaries, but when they state distinctly that the supposed increase in cancer is only apparent, and is due to improvement of diagnosis and more careful certification, and give as their reason that the apparent increase in cancer is mainly in what are called inaccessible cases, I cannot help pointing out that they have ignored the surgeons' triumphs altogether, and have only considered cancer as a necessarily fatal disease, which I for one am very unwilling to call it. It is admitted there is a great increase in the recorded deaths from cancer, and that this increase is mainly in what may be called inaccessible cases. Does not this tend to show that the reason the increase is not general is because, of operable cases, a great many are cured by operation? However, even if you grant all that I have said, it still remains certain that,

with so many possible sources of error, statistics which only cover a period of 10, 20, or 30 years are of little value. What we ought to do is to compare the mortality now with that of 100, 200, or 300 years ago, and, if possible, go back a thousand or more years; then we shall arrive at the startling conclusion that cancer is a new disease. What, then, is there in our modern life that has led to the increase of this complaint? Is it because we live faster? Is it because modern life is a life of worry and anxiety? Is it because we eat meat of infected animals? We are not competent at present to answer all these questions, because there is in cancer an unknown something to which we can give no name, the nature of which we cannot even guess at. As Bland Sutton says, "It is at present an inexplicable fact that we find a secondary cancer nodule, containing rich, regular, columnar epithelium, exactly reproducing the structure of the primary tumour in situations where there is no epithelium normally; secondary nodules of cancer do not caricature the liver cells, but are faithful reproductions of the primary tumour, as certainly as a fertilised ovum, if it completely develops, will reproduce an animal like to the animal from whose ovary it issued." Some day the riddle will be solved, and preventive measures will check the ravages of cancer as surely as they will check the spread of tubercular infection. The progress of medicine has been impeded for countless ages by the false notion that the doctor's only mission is to heal and cure disease. We are now at last awaking to the knowledge that our power of curing disease is and must always be very limited, while our power of preventing disease is almost unlimited; and, as one infectious fever after another, and one disease after another, is traced to its real source, we feel our horizon expanding, and a new hope dawning, that doctors will some day be all health officers, paid by the State to prevent the origin and spread of disease. To come down from the heights of speculation to the dead level of fact: I think we can safely say that there is nothing in our modern life which can be fairly said to cause cancer. It is found among the quiet and bucolic quite as much as among members of the stock exchange or the medical profession; and some cause, much more tangible and specific than worry or alteration of habit, will have to be found for the increase, and that cause will not be found until the nature of cancer is thoroughly understood. That we do not get cancer by eating the meat of infected cancerous animals may be looked upon as certain, for the Govern-

ment bacteriologists report that the stock in New Zealand is practically free from cancer, a few cases of papilloma or epithelioma being the only examples found, and of these only some eight or ten were discovered last year. Cohnheim's ingenious theory, which supposes many tumours to spring from unutilised fragments of tissue or residues, from vestigea, or "rests" as they are called, cannot be regarded as applicable to sarcomata, epitheliomata, or carcinomata. The phenomena of secondary growths reproducing the structure of the primary tumour are quite inexplicable at present, and compel us to admit that there is some essential link in the chain which we cannot discover.

Leaving now the question of the increase of cancer, let us pass to other considerations. I have long held to an idea which may be worthless, but to which I would like to call your attention to-day. I believe that just as in the lower animal and vegetable kingdoms new species are constantly being produced and old ones altering and dying out, so diseases are continually altering in type. Take for instance syphilis. There is no doubt that syphilis, which spread like a flame over Southern Europe during the great wars on Italian soil in the year 1494, was a very different disease from the syphilis we see now. It was then so universal and spread with such amazing rapidity that it was impossible to account for it by supposing the venereal act to have been the sole cause. It was an epidemic equal to small-pox in virulence, and became at that time so universal that there are some men who maintain that everyone now has some attenuated form of syphilis in his veins, and so is only capable of being attacked by it in a modified form. We all know how mild a course some cases of undoubted syphilitic infection run, even apart from any specific treatment; and, if we compare the syphilis of to-day with that of thirty years ago, we must admit that syphilis is a disease of diminishing virulence; and I maintain that cancer is a disease of increasing virulence. Is it possible that the attenuated syphilitic virus, while rendering us more or less immune to the attacks of true syphilis, may render us more liable to what some call the allied disease, cancer? The subject is a vast one, and opens up a wide and tempting field for speculation. The continual war of the minute organisms in our blood shows how interdependent diseases are on one another, and renders my theory at least permissible that we may acquire immunity against one at the cost of rendering ourselves more open to

the attacks of another. It is well recognised that persons suffering from some complaints are *ipso facto* protected from other allied ones. For instance, an eczematous asthmatic, while suffering from an attack of eczema, is usually more or less free from asthma. W. W. Thursfield, in the *Lancet*, August 3, 1878, p. 180, has contended that there is some correlation between diphtheria and enteric fever; and there does seem to be some sort of alternation between bad diphtheria years and bad years for enteric fever. The last summer in Wellington has been remarkable for a severe and very general outbreak of influenza; there has also been less enteric fever this summer than in any year that I can remember. Hitherto, we have been content to observe an alternation of this kind. May we not now begin to seek for a cause for this in the newly-discovered phagocytes? Are most of us in our youth protected from cancer by something which, as we reach middle-age, becomes only too often exhausted, and allows us to become a prey to cancer? Shall we, for example, ever be able to say that by curing a man's syphilis, or by protecting him from it by some immunised serum inoculation, we thereby render him more liable to the allied disease, cancer? It is a significant fact in this connection that when leprosy was disappearing from Europe, syphilis, a new form of disease, came suddenly into being. Now that syphilis seems to be dying out, is cancer taking its place?

Few, except those actually engaged in the work at all, appreciate how many men are devoting their energies to solving some of the mysteries of cancer. Only to mention two or three English workers will show the different ways in which the problem is attacked. Mr. D'Arcy Power, of St. Bartholomew's, has been following what he calls the chemical method, in contra-distinction to the histological method of Dr. Ruffer, and the bacteriological methods of Messrs. Ballance and Shattock.

Mr. D'Arcy Power has tried to inoculate pieces of carcinoma, while physiologically alive, upon mucous surfaces which have been kept irritated for long periods of time; with scirrhus encephaloid, epithelial, and colloid cancers the results were negative. This is surely a strong argument against the parasitic nature of these growths, and as far as it goes tends to confirm my theory that before cancer will develop in an individual, there must be either something favouring its growth in the individual or an absence of something, normally present, which would antagonise the new growth. I have lately been attending a very typical case

of epithelioma of the lip, and the history of it is worth narrating, because it is so typical. A man, aged 50, came to me eight years ago with a tiny little sore place on his lip, evidently produced by a sharp broken tooth. I warned him of the danger of neglecting it, told him to have the tooth out at once and to see me again. He neglected to have the tooth out because the inconvenience caused by the sore was so trifling, and he never came to me again till a few months ago, when he was dying. His history was that for six years after seeing me he continued to smoke a pipe, and that the sore, though trifling, never healed. During the whole of that long six years I have no doubt that the sore was a perfectly innocent one, and could have been readily cured by a little attention. He neglected it, and at last it began to take on malignant action. It was excised in the hospital; recurred. He went to Scotland, was operated on again, and finally returned here to die with a hideous fungating, ulcerating mass, occupying all one side of his face, and extending over his neck as far as the clavicle.

Here we had from the first all the usual antecedent circumstances required for the growth of cancer. A man between 40 and 50, with an unclean mouth (he never used a tooth brush on principle), a dirty pipe (he told me the nicotine always used to make his lips smart), a sharp tooth keeping open a small ulcer, and yet it was six years before it began to take on any malignant action. Was the delay caused by the absence of the proper pabulum for the cancer cell to develop? Was it because the protozoa of cancer did not happen to get inoculated all that long time? Or was there some protective influence at work which consumed the cancer element as fast as it grew, until at last the latter became too powerful for its antagonist? Upon the answer to questions such as these depends the solution of the cancer problem. I have a case of cancer of the breast at present under treatment, on which I operated on February 1st, 1897. It returned, and I operated again on September 20th last year. So far there is no recurrence. The case is interesting for this reason; the patient has had ever since the age of 20 darkly pigmented lips. She is of dark complexion, and anyone at first sight would think her lips had been tattooed after the fashion of Maori married women. This, however, is not the case, and the marking, when more closely examined, is black, not blue like the ordinary tattoo.

Jonathan Hutchinson says these patches are to be regarded as a pre-cancerous disturbance of nutrition, and that the pigment growths

occur in congenital and normal structures, which structures may reasonably be supposed to be survivals and to represent something which may have been more developed in the earlier links of zoological ascent. Thus they may be related to the patches seen in the mouths of some dogs. This is the only case I have come across with these pigment patches, and she certainly has developed cancer.

I have incidentally just mentioned the protozoa of cancer. Now it does not come within the scope of the survey of our knowledge of cancer, which I have had in my mind in writing this paper, for me to speak much of the histological or bacteriological aspects of cancer. It is well-nigh impossible for a general practitioner to do any original bacteriological work, and it would be wasting your time for me to cull extracts from writers which you have either read or could easily read if you were so desirous. The so-called parasitic protozoa of cancer, about which we hear so much now, must therefore be dismissed by me with a quotation which I believe fairly sums up our present knowledge of the subject. "While there seems to be a consensus of opinion that they are organised bodies, there is as much evidence for regarding them as endogenously-developed cells as there is for supposing they are parasites carrying on warfare against the elements of the host."

With regard to the diagnosis of cancer in its early stages, I feel that, in a review of our knowledge of cancer such as I am attempting, it is necessary to record my conviction that the microscope does not help us. In this opinion I am fortified by an authority no less than Jonathan Hutchinson. He quotes numerous cases where small portions of a doubtful growth or sore have been cut out, examined by recognised authorities, and pronounced to be non-malignant, but which have afterwards turned out to be cancerous. He strongly emphasises the danger, saying that a negative result from the microscope often begets false security, and leads to a loss of time which it is impossible to retrieve. In the well-pronounced conditions microscopic examination is not needed, and in the doubtful ones it cannot assist us. He adds, "This amounts to the assertion that in its early stages cancerous growths are not histologically cancer." This statement, if true, as I believe it is, is a hopeful one, for it indicates a stage during which treatment will ultimately be successful.

Time and your patience, which I have imposed upon already for too long, will not permit me to do more than allude to the theory

lately advanced that locality has much to do with the prevalence of cancer—that a low-lying, unhealthy, confined district, especially if on the banks of a sluggish stream, favours the occurrence of cancer, while the high, breezy upland is comparatively free; also that cancer sticks to certain houses, so that they get the name of being cancer houses. I may say at once I do not believe there is anything more than accidental connection in these cases.

And now a few words on treatment, and I have done. The inoculation of erysipelas as a curative measure seems so dangerous and so useless, that few are bold enough to try it now, though it is true one or two apparently successful cases of accidentally-produced erysipelas have been recorded. The Methylene Blue treatment I have tried in one case of inoperable abdominal sarcoma, with no effect. I believe it is now given up. The Celandine I have not tried, but I know of one case where it is being tried with apparently some benefit. Its use hypodermically seems to be that of a caustic, and not entirely free from danger. One or two writers report improvement under its use, but a great many say it is distinctly harmful. When the Röntgen rays were first discovered, hope was naturally felt that they might help us, first in diagnosis, secondly in treatment. I am afraid the hope has proved illusory. There is abundant evidence that prolonged exposure to the rays may produce a serious burn, but there is no proof of any curative influence being exerted upon cancerous growths. The Ichthyol treatment, about which Mr. O'Hara spoke hopefully at the last Intercolonial Congress, I have heard nothing more about, but I am trying it in one case now. Alcoholic injections, frequently repeated, into the tumour are reported to have caused, or at any rate accelerated, the atrophic process in one case of scirrhus cancer, which, however, died before the cure could be accomplished. Chian turpentine is not heard of now.

This account would not be complete without mention of the fascinating experiments of Dr. de Backer, described in his pamphlet, "*De la Cancerose et de son traitement par les Ferments purs.*" These experiments were made in consequence of an observation during a microscopic examination of some wine that had gone wrong: It was found that certain of the cells of the ferment (*Saccharomyces Pasteurianus*) contained englobed within them the bacillus aceti. In short, further investigation shewed that young vigorous cells of *Saccharomyces* were energetic phagocytes to most kinds of bacteria. It was not, however, because of their bacteri-

cidal powers that Dr. de Backer looked for and found in many instances a curative action of pure ferments on cancer. It was because they have the power of lessening the natural glycogen of the body. It is known that cancers contain a large quantity of glycogen, and that this disease occurs in localities in which glycogen is present in large quantities, as breast, liver, uterus, &c. If then the ferment lessens the natural glycogen of the body, it would have the power of checking the pathological increase of the same substance and so starve the cancer cells of a food on which they revel and increase. Here I venture to think we have, if not a great discovery, at any rate a very suggestive line of treatment. There seems to be a necessary something in the body for cancer cells to grow and thrive in and upon. If we can get rid of that substance we may prevent the cancer growth. At present I believe it is not suggested that any cases have been actually cured in this way. Early excision still remains, as it has been ever since cancer was known, the only really curative treatment.

Before resuming my seat I wish to propose, on behalf of the New Zealand branch, that we send a message of condolence to the relatives of the late Ernest Hart. No words of mine can do justice to the memory of that man, or to the value of the work he has done for the British Medical Association. His mantle has fallen on the shoulders of Dr. Dawson Williams, late Assistant Editor, and I have pleasure in congratulating him on his promotion, well-earned by 17 years' work on the editorial staff. I beg to propose that this meeting instruct the General Secretary to the Council to forward the expression of our sympathy to the relatives of the late Ernest Hart.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY,
 LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrsman, R. Bohrsman, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Forbes (Ashfield), Tayler (Woollahra), Scott (Balmain), Anderson (Petersham), Patrick (Marrickville), R. H. Collins (North Sydney), Hanson (Waverley). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Davenport (North Sydney), Brereton (Marrickville), Ward (Waverley).

The Hon. Librarian, N.S.W. Branch, B.M.A., requires *The Lancet*, No. 3,866, October 2, 1897, to complete series. He would be glad to receive this number, addressed to 121 Bathurst Street, Sydney.

SERUM DIAGNOSIS IN CHILDREN.

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BOURNE.

READ BEFORE VICTORIAN BRANCH OF BRITISH
MEDICAL ASSOCIATION.

I AM presenting to-night the results of 328 serum diagnoses in children which I have done during the past two seasons, and I herewith show a table containing about 80 or 90 of the most typical and instructive cases. Last year I used a 1 to 7 dilution exclusively; this year I have used a varying dilution, chiefly 1 to 10 (by far the larger number). In some doubtful cases, however, I have used a slightly stronger dilution—1 to 9, or 1 to 8; whilst in other better-marked cases the dilution has been 1 to 12 or more.

The serum has been used chiefly, as it was found that in many cases the reaction was obtained more quickly, the corpuscles not being present to get in the way of the agglutinating bacilli, though when corpuscles are present the specimen is more easily focussed. Still, in using the serum, a few corpuscles are always present, so that this slight objection may be dismissed. For the purpose of collecting the serum, a special capillary tube was made, which has a larger diameter than the ordinary vaccine tube, large enough to allow of the serum separating well from the clot.

The blood from the puncture easily flows up this tube without any sucking being necessary, the puncture being made with aseptic precautions, for the patient's sake.

The serum, after separating, is allowed to drop out or is blown out of the tube on to a piece of clean glazed paper or perfectly clean glass, and then 10 loopfuls of distilled water are placed at a little distance from the drop of serum. A loopful of the serum is then taken up, and well mixed with the distilled water, and then one loopful of the mixture is put on the coverslip, with a loopful of the young broth culture of Typhoid bacilli, using the same-sized loop. These are well mixed, and then the slide (with the edges of the hanging drop excavation greased with vaseline) is lowered on to the coverslip; the two adhere. Then a note of the time of mixing is placed on the label, and the dilution, and then the specimen is examined. When a reaction occurs, the time that has elapsed is recorded on the label also. This method allows of great accuracy in measuring the dilution, as the same-sized loop is used for serum and broth culture, and this is important.

The dried-blood method, however, is of great value, on account of the ease with which the blood can be drawn and sent to a distance. The capillary tubes, however, have given great satisfaction in this fair-sized number of cases. The time limit I have adopted is 30 minutes, no notice being taken of any reaction which takes place after that time, and in practice it is found that, with a 1 to 10 dilution, very few typical or even doubtful cases take longer than that for a reaction to take place.

As to the day of disease in which one can get the reaction, I have got it in two cases on the third day, and one on the second. This latter case (Reaction 268) is without doubt reliable, as the mother and her teacher declare that the child was playing about two days before the day on which the blood was drawn; but, doubtless, the disease was in actual existence longer than that. However, it was a mild case, only extending to the 13th day. This case is a good example of how careful one ought to be with children going about, if there is a rise of temperature which cannot otherwise be explained. On the reaction she was admitted, and only on that, as the patient had on the day of admission a normal temperature, and four days had elapsed in the meantime before I could examine the blood, so that the patient was presumably at about the sixth or seventh day when admitted.

In some of the cases, notably Reaction 166, 170, 178, and 198, there was no reaction at first on examining the serum, and, as a reaction is not often obtained till the sixth day, it has been my practice to take a negative reaction as meaning that whatever property Typhoid blood develops which causes clumping is absent in a negative case, and consequently it has been my custom to allow full six days before examining again, as may be seen from the table of specimen cases, and always at the second test in a genuine case I have succeeded in getting a positive reaction. It may be that four days or less would do, but that is a matter which experience alone must decide.

Some of the cases in the table will be found to lack the day of the disease, as there is frequently a difficulty in children in fixing a date, but wherever a blank appears it may be taken that the blood was tested at least after the sixth day. There was, as far as I could judge, no parallel between severity of illness and quickness of time in which the reaction took place; but what I have found is, that very pure uncomplicated cases, even though very mild, give a most decided reaction in a very short time. These cases were not necessarily

severe, but were very pure and apparently uncomplicated in type, and probably this is the very reason, the blood most likely containing only one kind of anti-toxin; but of course discussion on this point, as far as I am concerned, could be but mere idle speculation.

The cultures I have used have always been between 6 and 24 hours old, and at this point I may be permitted to digress for a moment to thank most heartily Dr. Cherry, Dr. Halford, and Dr. Mollison for their goodness to me in preparing cultures. Without their assistance this work would have been impossible.

Ten cases come under the heading of "Negatives where positives would be expected," that is, Clinical Typhoids which refused to react. One of these cases was treated at the O. P. department for 14 days for Typhoid; her temperature became normal two days after admission. Another of these cases was the subject of Reactions 118, 119, and 120, which had all the symptoms of Typhoid, bled from the bowel on three occasions, and had a crop of spots on the abdomen. And yet if we were to accept the test we ought to call it non-typhoidal, though the whole aspect of the case favoured a clinical diagnosis of Febris Enterica.

One case (Acute Enteritis) falls under the head of "Positives which ought to have been negative." This case was examined P.M., and no ulcerations found, and it had the appearance of an Acute Enteritis. This is exactly opposite to Gruber's experiments with animals immunized against Typhoid Fever, whose blood clumped cultures of Gartner's bacillus (*Bacillus Enteriditis*).

Regarding the usefulness of the test as a diagnostic agent, Reaction 187 is a case in point. A child *æt.* 6 years was ill 10 days with pain in abdomen, which was not referred to any special locality of the abdomen. The patient was greatly distended, so much so that it was impossible to elicit dulness anywhere. The question, was it an appendicitis which had perforated or a Typhoid which had gone wrong, was answered in the negative, as far as the latter was concerned, when her blood was submitted to Widal's test. On this result, a diagnosis of appendicitis was made, and an immediate operation performed, when it was found, as was expected, to be a septic peritonitis supervening on a perforated appendix, there being an unusual foreign body in that *cul-de-sac* in the shape of an ordinary pin.

I have entered up only seven Febriculas amongst the negatives. These were cases to which no other name could be given. On the other hand, I could multiply instances of slight fever

which, before the advent of the test, would have been called Febricula, but which now must be called Typhoid, and it is in this connection, to my mind, that the great value of the test lies, for it enables us to treat by isolation, disinfection, &c., cases which formerly were not paid particular attention to as regards prophylactic measures, but which at the same time were capable of disseminating the disease broadcast.

In children, then, Febricula will in time, I trust, disappear as a name from our books, and these cases must then be assigned to their proper place. The economic advantage to the State must be patent to all, and the purity of statistics will also be a great advance.

A systematic examination of the blood has been made this season in all cases which had a short continued fever, and on the result a diagnosis of Typhoid fever was made in quite a surprising number of cases, so that on the bed tickets Febricula is now very seldom diagnosed, and only in those cases to which no other diagnosis could provisionally be made. I was conscious for some time that, in diagnosing cases as Febricula, I was creating a rubbishy heap for my ignorance, so that the test has to me been a corresponding relief to my "statistical anxieties."

I am not aware yet how many of these that did not react were Influenzal in origin, and would be glad to know of the results of any clinicians who have searched in this direction, and shall rest satisfied if these notes prompt anyone to investigate this.

Some of these apparent Febriculas are represented in chart form, and they are typical of instances which could be multiplied indefinitely.

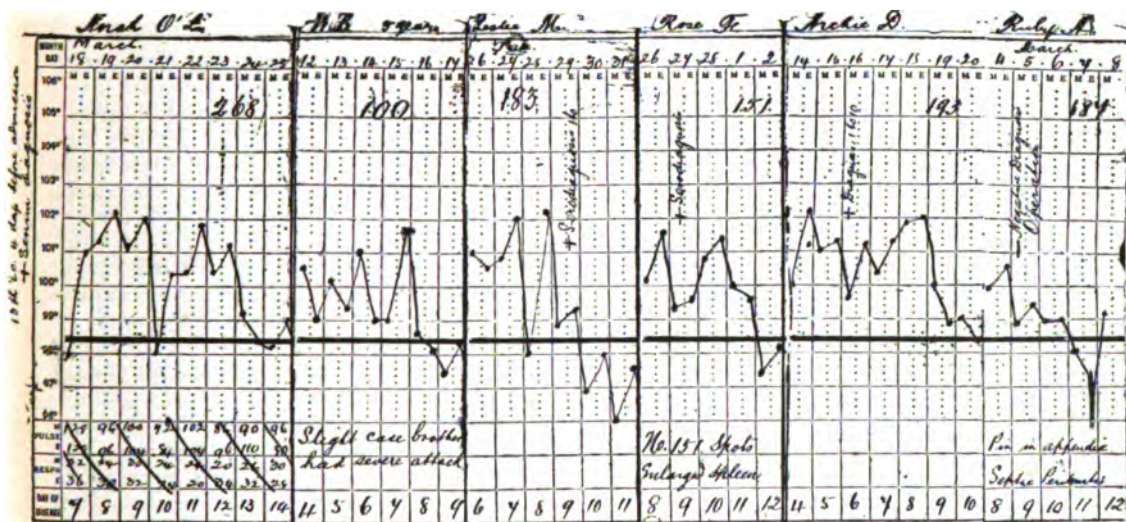
I have referred to a time limit, and that reminds me that three cases of serum drawn last year were not examined then, but were examined this season, and they reacted well, as well as if they had been fresh. These were sera which had been hermetically sealed in tubes. I doubt, however, whether this will ever be of any practical importance. Still it is as well to state and record the fact.

I have obtained the reaction with tears, and also the sweat. The latter was obtained in one case in the table (165), and in one other case in the list of recent ones, which has not been appended.

I have also got a reaction with serum from a blister, but the really important matter is the reaction with sweat. I hesitate to state the fact, because all good observers, at least till recently, have failed to get a reaction, and I would prefer to put it down as a mistake on my part.

No.	NAME.	Day of Dis- ease.	Dilu- tion.	Time in Mins.	CLINICAL RESEMBLANCE.	REACTION AND REMARKS.
131	Florrie B. . . .	12	6	65		- Was therefore diagnosed "Febricula."
132	Eva A.	9	10	6		+ Was diagnosed Bronchitis. Blood not examined till four weeks after discharge.
133	Leonard L. . . .	11	10	7	Feb. Ent.	+ Admitted to hospital on the diagnosis.
134	Fred. L.	13	10	9	"	+
135	Sydney P.	11	10	9	"	+
136	Ada H.	24	10	4	"	+ Well marked.
137	Lizzie O'D. . . .	16	10	13	"	+
138	Chas. P.	6	10	21	Diagnosed "Febricula"	+ Hardly any temp. A good though delayed reaction on 5th day. Brother to 135.
139	Violet K.	7	10	60	(?) Febricula	- Was therefore diagnosed "Febricula."
130	Harry P.	10	10	5	Feb. Ent.	+ Well marked. Fatal case; suppurative Parotitis as complication.
131	James H.	8	10	3	"	+ Well marked. Fatal case.
132	Mary O'M.	11	10	11	(?)	+ Well marked. Was diagnosed Purulent Vaginitis, with Septic Absorption.
133	Sophie J.	—	10	19	Feb. Ent.	+ Marked.
134	Dorothy T. . . .	7	10	6	"	+ Marked.
135	Albert H.	6	13	66	(?)	- Had what was diagnosed afterwards, Acute Dysentery.
136	Edward D.	23	10	25	Feb. Ent.	+ Immediate. Had crop of boils.
137	Elizabeth Y. . . .	6	10	24	Febricula	+ Was diagnosed "Febricula." Blood examined after patient left the hospital.
138	Sam W.	—	10	28	Feb. Ent.	+
139	O. P. (Control) . .	—	10	60	Infantile Paralysis	-
140	Fred. O.	14	10	75	(?) Febricula	- No reaction. } Were diagnosed "Febricula."
141	Rose R.	10	8	70	(?) Febricula	- No reaction. }
142	Tom W.	16	10	19	Febricula	+ Vide accompanying chart.
143	Louise D.	15	10	13	Feb. Ent.	+ Slight fever at first. Had a severe relapse.
144	Daisy R.	—	10	8	"	+ Fairly well marked. Had Double Sciatic Neuritis as a complication.
145	Claude H.	23	7	11	"	+
146	Albert B.	10	10	17	"	+
147	Joseph H.	9	10	15	"	+ Very slight fever. Vide accompanying chart.
148	Ivy H.	13	9	40	"	- } Was an out-patient before admission, and had a continued fever for a fortnight, and certainly looked like a Typhoid.
149	"	18	10	64	"	- }
150	James A.	19	10	7	"	+
151	Rose F.	9	8	11	(?) Febricula	+ Well marked. Vide chart.
152	Geo. W.	13	10	23	Feb. Ent.	+
153	Hilda O'N.	—	8	46	(?)	- Negative. This looked like a Typhoid with good remissions. Later on she suddenly developed a pericardial bruit.
154	Frank P.	10	10	4	Feb. Ent.	+
155	Annie O.	13	7	3½	"	+ Well marked in 2 minutes, and complete reaction in 3½ minutes.
156	Evelyn L.	14	8	1or less	"	+ Immediate.
157	Florence K. . . .	9	10	6	"	+ Good clumps in 2½ minutes, but no total loss of movement till 24 minutes.
158	Ada L.	20	8	21	"	+ Typical clumps. Patient was 19 months of age only.
159	Alex. L.	15	8	1	"	+ Beautifully marked reaction before it could be focussed.
160	Maud L.	9	10	6	"	+ Clumping and cessation of movement took place together.
161	"	21	12	3	"	+
161	Anna D.	4	10	51	"	- }
161	"	9	10	23	"	- } Was diagnosed Feb. Ent. in spite of the reaction; got positive in five days after.
162	Alice W.	29	10	7	(?) Febricula	+ Well marked.
163	Frank L.	18	10	7	Feb. Ent.	+
164	Lena M.	17	10	12	"	+
165	" (sweat)	17	7	27	"	+
166	Frank H.	13	10	60	"	- Slight clumping in 27 minutes, with greatly retarded movement.
167	"	18	10	16	"	+
168	Daisy S.	19	10	8	"	+ Well marked.
169	John O.	15	10	4	"	+
170	Sydney M.	18	10	45	"	- }
171	"	24	10	7	"	- } Waited for six days and then got a well marked x reaction.
172	Rupert G.	(?) 8	10	23	"	+
173	"	9	10	3	"	- } Fatal. Hyperpyrexia.
174	Pauline T.	21	10	13	"	+
175	Hettie O.	11	10	8	"	+
176	Keith O.	11	10	1or less	"	+ Marked; immediate.
177	Martha H.	9	10	4	"	+
178	Vitus B.	6	10	50	"	- }
179	"	13	10	1or less	"	- } Reaction six days after negative.
180	Ruby H.	15	10	2½	"	+
181	George J.	23	10	8	"	+ Reaction got on second day after admission. Vide chart.
182	John O'D.	8	8	4	"	+
183	Leslie M.	9	8	10	(?) Pneumonia	+ This case resembled Pneumonia only in the fall of temp. Resp. never abnormal, and no physical signs. Vide chart.
184	Elsie T.	5	7	10	(?) Feb. Ent.	+ Slight clumping in 6 minutes. Movement lost in 17 minutes.
185	Carl J.	12	10	6	Feb. Ent.	+
186	Clarice D.	8	10	13	"	+
187	Ruby A.	10	10	38	(?)	- Operation on diagnosis. Was found to be Septic Peritonitis. Pin in appendix.
188	Elsie D.	20	10	3	Feb. Ent.	+ Well marked.
189	Minnie O.	7	10	4	"	+
190	Sam G.	8	10	43	Pneumonia	-
191	Victor J.	9	10	34	"	-
192	May W.	5	10	7	Feb. Ent.	+
193	Archie D.	6	10	17	"	+
194	Alice O.	8	10	47	Pneumonia	-
195	Gladys M.	7	10	51	Acute Colitis	- Fatal.
196	Arthur K.	5	10	40	Appendicitis	-

No.	NAME.	Day of Dis- ease.	Dilu- tion.	Time in Mins.	CLINICAL RESEMBLANCE.	REACTION AND REMARKS.
197	Maria H. ..	9	8	22	Feb. Ent.	+ Fatal from progressive Heart failure.
198	Eunice D. ..	14	10	60	"	- } Ill 14 days outside. Culture working well on day on which
199	" ..	20	10	8	"	+ } negative was got.
200	Leslie C. ..	18	9	11	"	+ "
201	Tom W. ..	8	10	23	"	+ Well marked. Fatal case; Parotitis.
202	Jane D. ..	8	8	41	(?) Feb. Ent.	- Turned out to be a Pneumonia with few physical signs and not much increase in resp.
203	Ethel L. ..	—	9	35	Out-patient	-
204	Alice S. ..	6	9	24	Feb. Ent.	+ Incomplete.
205	Herbert D. ..	10	9	30	(?) Pneumonia	-
206	Hilda O'N. ..	19	10	38	Pericarditis	- Companion reaction to No. 153.
207	Michael P. ..	—	10	32	Feb. Ent.	+ "
208	Leonard S. ..	—	10	50	(?)	- Abdominal pains only symptom, with slight rise of temp.
209	Annie R. ..	—	10	60	Morbus Coxæ	- Control.
210	Ada T. ..	7	20	38	Feb. Ent. (O.P.)	+ "
211	Eileen K. ..	14	10	9	(O.P.)	+ "
212	Winnie S. ..	—	10	1 or less	Feb. Ent.	+ Immediate. Ulcers down to rectum. Fatal case.
213	Geo. K. ..	18	10	7	"	+ Marked; immediate.
214	Aileen McC. ..	8	10	4	"	+ Marked. Patient only 17 months old; had diarrhoea, with look of a Typhoid.
215	Nell R. ..	8	10	37	"	+ Partial.
216	Claud S. ..	14	10	10	"	+ Very marked and typical.
217	Kathleen S. ..	—	10	6	"	+ Marked.
218	Vitus B. (S) ..	54	10	1 or less	"	+ Marked; immediate; seven weeks after a typical attack. Vide 178, 179.
219	Jos. W. ..	—	10	130	(?) Tubercle of Lung	- Control.
220	Herbert H. ..	—	10	14	Feb. Ent. (O.P.)	+ "



Another interesting case was that, the subject of Reaction 135, which afterwards turned out to be Dysentery Acute, of a mild type, but which for a time certainly looked remarkably like a Typhoid.

One point which struck me was the way in which the reaction declines in some of those very mild cases of Typhoid which can only be diagnosed by the reaction. The reaction in severe or well-marked cases has been known to persist, even within the half-hour time limit, for a considerable time after, and of course this question always will arise when a reaction is

obtained: Is it the present disease, or something which has been present in the past? And it is here that a negative result rises to the position of first importance, as, for instance, in obscure cases where the diagnosis lies between Typhoid and, perhaps, Meningitis, Pyosalpinx (in adults), or Appendicitis. In performing the reaction itself absolute cleanliness is needed, coupled with accuracy of dilution and broth cultures, which are pure growths in neutral peptone bouillon. After mixture and focussing it is very important to let the slide stand for a time under the lens of the

microscope, and I have found in practice that one should be careful to focus the lower strata of the hanging drop, as frequently the clumps which have formed sink to the bottom of the drop in the same way that they do in the slow method tubes, and as the whole of the clumping influence may have been expended on say half the organisms present, it leaves the other half of the total number of bacilli free to wander about in the upper strata of the hanging drop, and if only these be focussed they may appear unaffected. This remark, however, applies more especially to very large dilutions, since in the more concentrated sera all the bacilli present are more or less affected.

With regard to controls, a culture should be tested with a control first to see how it is working, and I have lately adopted a plan which is of distinct advantage. When a good control is found a small quantity of this blood is obtained and diluted to 1 to 10, and then put in a long sterile tube drawn out at the ends; then when a control is required it is merely necessary to get a little out of the known satisfactory control, and seal up the tube again.

I append here a table giving the percentages of Typhoids and "Febriculas" which responded to the test, and a list of the diseases which did not react.

The specimen table containing about 100 reactions will show some interesting features found out in this series of tests.

In conclusion I beg to thank the honorary staff, Drs. Snowball, Bennie, Ryan, Wood, and Russell, for their kind permission to carry out these tests on their patients, and to Dr. Stawell also for valuable hints.

Year.	Cases Examined.	Reacted.	Percentage of Reactions.
1896-97	Typhoids ... 79	75	95.2
	"Febriculas" 25	22	88
1897-98	Typhoids ... 162	156	96.3
	"Febriculas" 30	26	86.6

Diseases which did not react:—Dysentery, Hydatid of Liver, Influenza, Endocarditis, Pneumonia, Septic Enteritis, Phthisis, Gastro-enteritis, Bronchial Catarrh, Tub. Meningitis, Infantile Paralysis, Appendicitis, Acute Colitis

A paper entitled "Vomiting for 18 Years," by H. G. H. Naylor, L.R.C.P., appearing in *A. M. Gazette*, December, 1897, is referred to by *New York Medical Journal*, February 19th, 1898.

NOTES ON TYPHOID AND THE WIDAL REACTION.

By J. W. SPRINGTHORPE, M.A., M.D., M.R.C.P.,
PHYSICIAN TO THE MELBOURNE HOSPITAL,
MELBOURNE, VIC.

THE unpleasant fact that we are in the midst of a very extensive and severe epidemic of typhoid fever is sufficient justification for the predominance of that disease upon our first agenda for the new year. The statistical statement of the case may well be left until the close of the epidemic. Meantime, it is within limits to describe the present visitation as the most widely-spread and fatal since the years 1889-90, when, instead of the yearly mortality from typhoid fever in the metropolis being about 150, as has been the case ever since except in 1891, it was given by Dr. Gresswell as 560 and 403 respectively. A similar increase prevails, I believe, in the country also, although so far no complete statistics can be obtained.

Causation.—There are at least four factors that require consideration. 1. *The specific organism* that produces the disease, and which will live for weeks in water, and for many months, if not years, in polluted ground, has, no doubt, been much less applied to soil and water of late years than previously, though much contamination must still continue, and sufficient germs be already present in and around Melbourne to make extensive epidemics possible for many years to come. And the extensive excavation necessitated for our gigantic sewerage system must almost certainly have largely increased their possibilities of mischief, though the presence of many epidemics in the country shows that other and more widely-spread factors have also been at work. 2. *The personal vulnerability* also has probably been increased by the lessened amount of protective vaccination, resulting from some years of comparative immunity. The internal conditions that are required for the successful invasion and lodgment of the germ are too ill understood to allow of any generalisations therefrom, except, perhaps, to venture the suggestion that though catarrhal and notably influenzal conditions have not been predominant, seasonal derangements have been unusually common. 3. Closely allied is the question of *modes of infection*. Though one of the first and most strenuous supporters of the water-borne theory of typhoid infection in our community, and, with M. de Bavay, responsible for its first, and so far only actual proof, I cannot but think we are now apt rather to under-estimate the influence of

dust and flies. In a dust-ridden city, like Melbourne, where almost every vacant area has long been a dépôt for the disposal of typhoid excreta, it would be indeed a miracle if typhoid germs were not often blown about from place to place, and thus more or less constantly during the season infecting stored water, milk, uncooked vegetables, etc., to a very large degree, more perhaps even than the contamination which our water authorities still permit through defective fire-plugs and faulty reticulation. That some are thus blown into the naso-pharynx also is extremely probable, and, though most may be active only if swallowed with subsequent food or drink, it is possible that some are locally infective, and may even give rise to that clinical variety which begins with a pneumonia, and which the Americans have called pneumo-typhoid. Similarly, with us, where the pan system with all its abominations is in common use, and flies are at times little less than an Egyptian plague, it is easy to imagine that not a few cases of typhoid must thus originate. It is quite possible, of course, that season exerts an influence in these two directions as well as in making men more thirsty and facilitating the incubation, so to speak, of more crops of typhoid germs. It is this variety in mode of infection that makes practically valueless from a localisation point of view all our statistics and hasty generalisations therefrom, seeing that they one and all are based upon the unproven assumption that a man contracts his typhoid where he sleeps. 4. It is indeed to *seasonal conditions* that we owe most of the increase in our present typhoid crop. As mentioned by Dr. Carstairs (*Trans. Intercol. Med. Congress*, 1892, p. 610), the period of prevalence of typhoid is characterised by a high temperature, a minimum of ozone, decay in vegetation, and active decomposition of organic matter. In addition, Dr. Hardie (*Atmospheric Pathology of Queensland*, 1893) has shown how the periods of high mortality are also associated with high barometric pressure and low rainfall, a heavy rainfall interfering apparently with the germination of the bacilli and lessening their dispersion by means of dust. Most of us will, I fancy, be able to corroborate the value of these observations in respect to our present visitation; and it is by the prevalence of these favourable conditions to an unusual degree that in my opinion the good work done for years past by Dr. Gresswell and the Board of Health seems temporarily to be checkmated.

Diagnosis.—It can, I believe, no longer be fairly maintained that the diverse continued

fevers which, amongst us, are lumped together as typhoid are simply clinical modifications of one and the same disease. All careful observers must have been struck by the fundamental differences which occur in the mode of onset, character of stools, size of spleen, site of ulceration, and relative implication of organs. Take, for example, one of the best definitions of typhoid fever, that in Anders' *Practice of Medicine*, 1898—"an acute infectious disease, characterised pathologically by hyperplasia and sloughing of Peyer's patches, and clinically by slow insidious onset, peculiar temperature curve, swelling of spleen, rose spots, diarrhoea, tympanites, and liability to hæmorrhage and perforation, with an average duration of 3-4 weeks." The only facts that with us invariably apply to what is daily called typhoid are the phrases, "an acute infectious disease with a liability to hæmorrhage and perforation." So far from ulceration of Peyer's patches being pathognomonic of the bacillus of Eberth, it is present in other diseases also, and other ulceration is often predominant in the so-called typhoid. The onset, again, is almost as often said to be sudden as gradual. The temperature curve is, so far as we can see, not necessarily characteristic in development, continuance or decline, though it must be admitted that most make noticeable attempts in that direction. In quite a number of cases also the spleen is found not enlarged, there are no rose spots, there is constipation instead of diarrhoea, and tympanites and "peasoup" stools may be avoided by diet, whilst the duration, though generally as defined, may frequently be a week or less. Nor is it sufficient, unless corroborated by bacteriology, to try clinically to explain these differences under subdivisions, such as spleno-typhoid, cerebro-spinal typhoid, typho-malaria, pneumo-typhoid, and nephro-typhoid, for in some cases at least they are accompanied by the presence of other germs in pure culture. As some of you may remember, M. de Bavay and I have already reported in this direction. 1. The confusion between typhoid and gastrointestinal influenza, to which I drew attention in 1889, is now generally admitted. What was then only a clinical differentiation became by 1894 a bacteriological certainty by our thrice finding the influenza germ in the blood of patients certified to have been suffering from typhoid. That such influenza was at times the prelude to typhoid invasion, probably by its intestinal catarrh and ulceration, was also noted here before it was reported in France and Germany. Suggestively enough, the *B.M.J.* which has just arrived contains a letter upon

this very point of differential diagnosis. 2. Again in the *Australian Medical Journal* for June, 1891, M. de Bavay described how on two occasions he had obtained from so-called typhoid spleen a pure culture, not of Eberth's bacillus, but of a much more virulent organism, which he there describes, and the toxin of which was an albumose, and not a ptomaine. Subsequent limited observation seemed to show that this more poisonous germ was the cause of cases of "typhoid," characterised clinically by sudden onset, predominance of head symptoms, small spleen, absence of spots, and wider implication of solitary glands and large intestine, and even greater tendency to hæmorrhage. The case is thus strong (though it awaits further external corroboration) against the identity of some at least of such cases with true typhoid. 3. Nor does this exhaust even our own work of differentiation. In the *Australian Medical Journal* for November, 1894, is described as "a new form of disease" a case sent into hospital for typhoid, which died in the second week from hæmorrhage and high fever. The *post-mortem* showed injection of the small intestine, and deep ulceration of colon and rectum, with medium-sized spleen, and no characteristic typhoid lesions anywhere, and sowings from the spleen gave pure cultures of the bacillus of malignant œdema. In this case, M. de Bavay had the subsequent satisfaction of hearing from M. Roux, of the Pasteur Institute, that he had had a similar experience in two Paris cases. Thus a hæmorrhagic inflammation of the bowel, clinically mistaken for typhoid, may arise from quite a different bacillus, viz., that of malignant œdema.

The Widal Test—It was but natural that sero-diagnosis and sero-therapy should play an important part in typhoid as in other infectious diseases. It had been long known that the typhoid germ itself acts locally, that it secretes a toxin or ptomaine, and that the general symptoms are due to the reaction of the blood upon this circulating poison. The absolute specificity of similar toxins, though chemically still beyond us, has been practically settled in the case of tuberculosis, diphtheria, anthrax, pneumonia, septicæmia, &c. The next step was the discovery that healthy blood equally specifically resents such invasion by a specific anti-toxin; and the last that, in the case of typhoid at any rate, the germ itself becomes timid and paralysed in the presence of such antagonism. Hence on bringing the two together in any one of the recognised methods, we have the characteristic reaction of clumping and immobility, where previously there was free movement and in-

dependent action. That this does actually occur, and is typical of typhoid, may now be considered settled. But how long typhoid-infected blood retains this specific antagonism sufficiently sharply to still react to typhoid cultures, and how far pseudo-typhoid and kindred germs share such reaction, are further questions which still remain unsettled. Personally, I have seen blood reacting unmistakably 12 years after typhoid invasion, and, but for a sudden death, had hoped to have given you to-night the result in a case that had typhoid 34 years ago. Others quote cases reacting up to 14 years. Again, I know of no satisfactory evidence as to the presence or absence of reaction of typhoid blood upon the so-called pseudo-typhoid bacilli. Nor, so far, have we any evidence in the case of what I venture to call de Bavay's germ, though it is worthy of note that in a fatal case, clinically and pathologically resembling those so produced, the typhoid reaction was said to have been present. Meantime, however, it may be taken as practically certain that reaction shows either present or past invasion by the bacillus of Eberth, or its allies, and that absence of reaction proves the absence of such organisms in the present disease, and for an indefinite number of past years also.

Granted such powers, the clinical value of such a test is enormous. 1. In the case of children, where previous typhoid is often practically out of the question, it swiftly and definitely differentiates typhoid from enterocolitis, febricula, "continued fever," gastro-enteritis—otherwise a problem of the greatest difficulty and often insoluble. I show you the charts of several such cases, settled by the Widal test (p. 200). In some, we were otherwise able to make a correct diagnosis; in others, the test made us alter our provisional diagnosis. 2. Cases of acute tuberculosis, of acute pneumonia without typhoid, of gastro-intestinal influenza, and of septicæmia, as well as appendicitis and obscure cases of pyosalpinx, can now be speedily differentiated from true typhoid with all the satisfaction and safety that may accompany such exact diagnosis. Already, also, we have been able to exclude septicæmia and appendicitis in certain critical cases, and to differentiate typhoid in several cases of influenza and tubercle. One of these latter is specially interesting. It is that of a young gentleman who had arranged to leave for South Africa on a certain day. Meantime he has a (?) typhoid attack, with sustained temperature. There is, however, absolutely no Widal reaction with the blood. The same day his temperature is

normal, and remains normal. Next afternoon he is allowed a shower bath, a comfortable meal, and next morning the run of a garden—all without bad effect. His relatives in England are spared a cable with the ugly word typhoid in it, and his business interests not interfered with; for he had had a little febrile influenza, and no typhoid. Similarly with a nurse in ward XII.; after six days' fever, she was spared the usual post-typhoid rest in bed, and restricted diet. (3) An even more interesting result of the use of the Widal test has been the discovery that a large number of cases of mild fever, which I, for one, had hitherto declined to recognise, or diagnose, as typhoid, are shown by the reaction to be typhoidal—assuming, of course (in so far as we know, with reason) that the reaction is due to present and not *past* typhoid infection.

I append in tabular form some of the more important points in 11 such cases:—

	Age.	Days Feverish Outside.	Days Feverish in Hospital.	Highest Temp. in Hospital.	REMARKS.
1	12	4	2	101.6°	
3	17	3	4	101.4°	
3	20	6	2	99.9°	Some blood & slime in stools.
4	21	5	4	101.8°	Some slime.
5	26	7	4	100.8°	
6	16	1	9	103°	
7	18	2	3	103.2°	Several slight recrudescences
8	10	4	9	104°	
9	31	7	2	104.2°	(?) "Slight" relapse for 4 days.
10	23	15	4	100.6°	Some slime.
11	15	14	3	102.8°	Curds and slime.

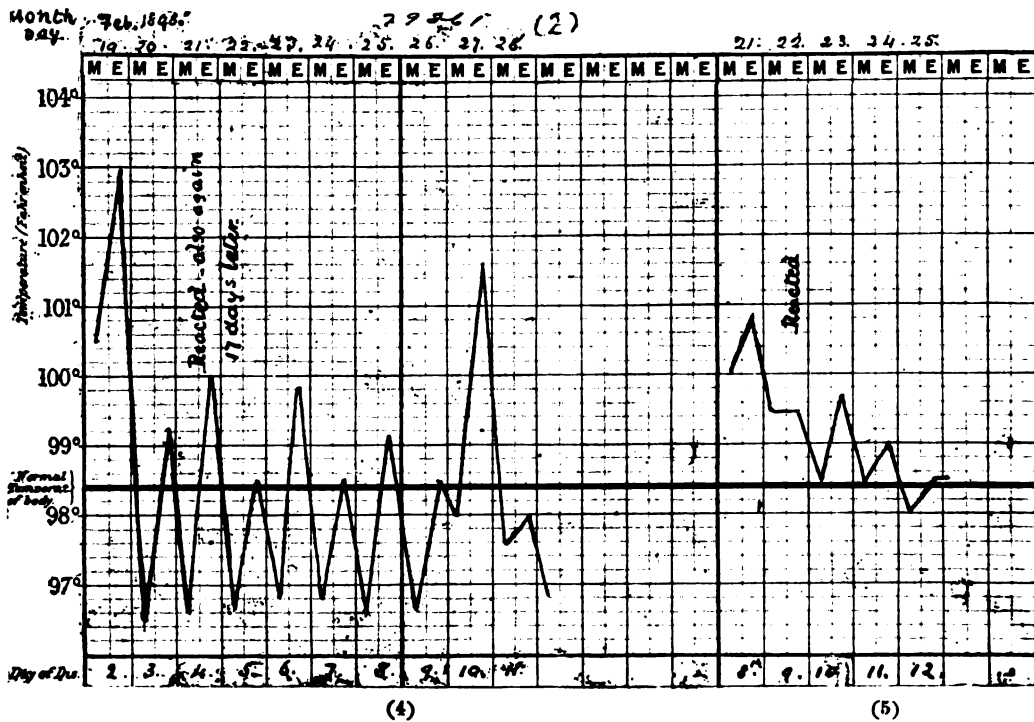
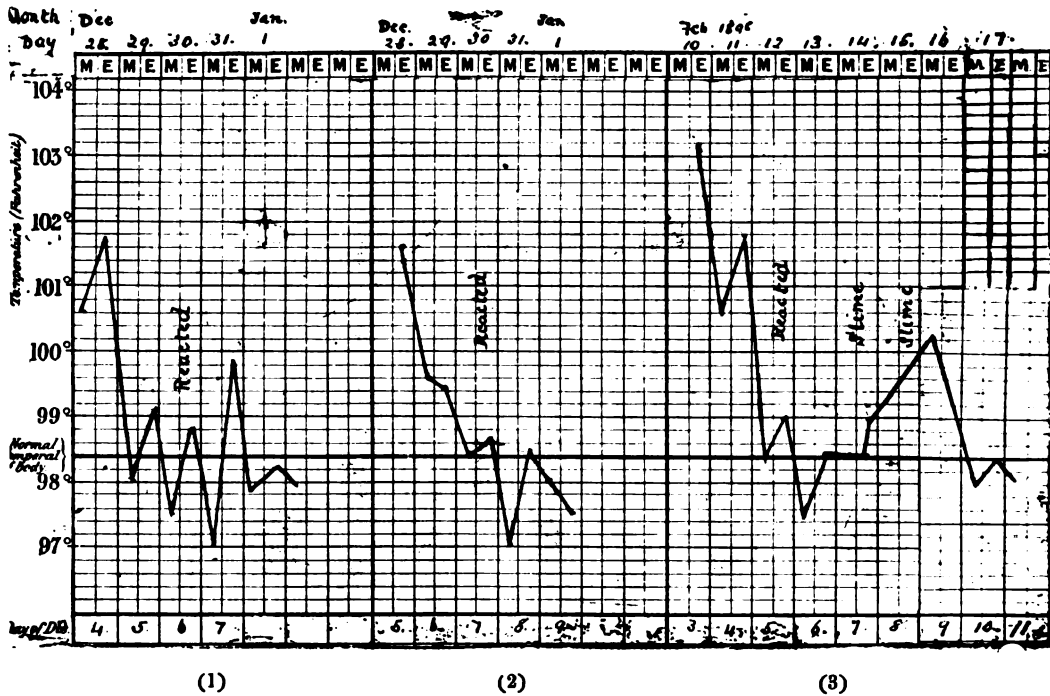
None of these cases gave any history of past attacks, or showed anything otherwise typical of typhoid fever, though some had a suggestion of the habitude that marks more severe attacks. I hope, also, that the exigencies of space will allow of the reproduction of some, at least, of the charts which I now exhibit, since the ocular demonstration will prove more satisfactory.

These results, I take it, prove what upon the strength of a single case I ventured to suggest when previously bringing before the Branch my first experience with Widal's test, viz., that in addition to the cases ordinarily known and recognised as typhoid, there exist a large number of mild or aborted cases, which might easily be mistaken for non-typhoid, and which, indeed, are often so mistaken; and that such cases may have few, if any, of the symptoms of an ordinary attack, may not be confined to bed, or be placed upon restricted diet, and yet

may remain mild and even unnoticed. So far as I am aware, this is the first proof of what has previously been denied by some and maintained, though without full evidence, by others. And such a conclusion, if true, has important bearings both to the individual and to the community. To the individual, it may explain what is to so many a stumbling-block, viz., the subsequent immunity of so many individuals under circumstances of common danger of infection—they are protected by previous slight attacks of which they themselves may be ignorant. And to the community it emphasises the necessity of disposing of excreta in some more sanitary manner than "trenching into the soil so many inches deep before 7 a.m." Just as infectious sore throat has proved often to be mildly-diphtheritic sore throat, so febrile excreta may turn out to be typhoidal, and the "*de novo*" theory of typhoid originating in decaying excrement may thus have its basis in actual unsuspected infection.

Such are some of the questions bound up in this most important of all diagnostic measures. For the information of members, I send round the remainder of my charts in which the Widal test has been applied by our pathologist, Dr. Mollison, to cases in my wards during the present epidemic. They will see that in every case of typhoid a reaction has been present. They include seventeen cases of average severity, five cases with relapses (one with a second relapse), three with hæmorrhage, two with boils, two with slow healing and recrudescences, two with pneumonia, and eleven fatal cases (hæmorrhage five, perforation two, pneumonia three, heart disease and tubercular knee one). Cases under treatment, in which the test was not applied, are not included. The type of the epidemic has been very severe, the worst I have ever experienced during my ten years in the hospital. The charts also will show in one place or another the operation of the different factors in post-typhoid temperatures, viz., food, constipation, excitement, post-typhoid anæmia, recrudescence, and relapse.

There are many other points in reference to typhoid which I must leave untouched owing to exigencies of time. Let me for the present conclude with two lessons from the use of the sterilised malt extract in more than 300 cases. They are, first, that there is no characteristic typhoid stool—the one usually so described is simply the result of milk diet in an intestinal inflammation—and, secondly, since no case has yet distended whilst on the malt diet, tympanites need not be present, even in the worst cases, unless a perforation occurs. For pur-



Temperature Charts illustrating Dr. Springthorpe's "Notes on Typhoid and the Widal Reaction."

poses of comparison, I have asked Dr. Perry to bring for your inspection the intestines (a) from a typical case; (b) from one in which the large intestine was completely pock-marked with ulcers, whilst the small intestine was only slightly affected and the spleen not at all enlarged; (c) from a case with a perforation on a partially-healed ulcer, with the rest of the intestine healed; and (d) from a case of dysenteric ulceration of the colon and rectum. Another specimen, in which there was an ulcer seventeen feet above the ileo-cæcal valve, has, unfortunately, been sent on to the University.

NOTES ON A FATAL CASE OF ACUTE
PUERPERAL SEPTICÆMIA TREATED
WITH ANTI-STREPTOCOCCUS
SERUM IN ADDITION TO THE
USUAL METHODS.

By T. J. HENRY, F.R.C.S. ED., GRAFTON,
N.S.W.

At 7 a.m. on December 21, 1897, I was called to see Mrs. X., *æt.* 34. I was informed that she had been confined on the 13th inst., and had expected, the labour having been easy and uneventful, to get up and resume her household duties on this, the traditional "ninth day" of the wise women. During the previous night, she had, however, shivered several times, had been afflicted with a severe headache and been inclined to wander. These symptoms had suggested the propriety of seeking medical advice. The confinement was the thirteenth. No medical man had been in attendance, and a casual midwife had officiated.

A glance served to diagnose septicæmia, the typical physiognomy and other signs being well marked. Temperature 103°, pulse 112, respiration 38. Lochia scanty—it had suddenly become so two or three days before—and offensive. The breast-milk had also diminished *pari passu* with the lochia. I learned that the midwife, who was wholly devoid of technical training, had each day irrigated the vagina with a solution of Condy's fluid. The utensil was one of the common japanned-tin kind. As the infection obviously occurred some days after labour, I consider it necessary to emphasise the fact that such an implement had been employed by one unlearned in antiseptics and utterly devoid of the antiseptic instinct. Turning my attention to the patient, I washed out the uterus with a solution of Tincture of Iodine, a drachm to a pint. I also prescribed a mixture containing Digitalis, Strychnine, and Quinia, and ordered an ounce of brandy every four hours. I also administered a saline purge.

6 p.m.—Temperature 104.2°. A vaginal douche of Iodine solution given; the body well sponged with iced water.

December 22, 10 a.m.—Temperature 102.2°. Lochia more in quantity and less offensive; uterus again douched with Iodine solution.

6 p.m.—Temperature 104.8°, pulse 110. Vagina douched with Corrosive Sublimate solution, 1 in 2,000.

8 p.m.—Temperature 103.5°, pulse 100. Phenacetin, gr. xii.; Caffeine Citrate, gr. iii.

December 23, 10 a.m.—Temperature 101.8°, pulse 100, respiration 36. Intra-uterine douche of Lysol, 1 per cent.

6.30.—Temperature 104.2°, pulse 120, respiration 40.

7.30.—Anti-streptococcus serum (dry B. & W.) used; 20 c.c. injected in interscapular region.

An hour and a half later, temperature had fallen to 100°, over four degrees. No other symptom was improved, pulse unchanged; she was more delirious. She was also very drowsy, frequently falling into light and restless slumbers, during which she "chanted snatches of old tunes." She had several rigors throughout the night.

December 24, 7.30 a.m.—Temperature 105°, pulse 120, respiration 44. Markedly worse in all respects.

10.30 a.m.—Temperature 106.2°, pulse 140, respiration 50. Dr. Cameron saw the patient with me, and agreed that to curette her was the next course. He chloroformed her, and I thoroughly scraped away as much endometrium as possible, using a flushing curette and hot boiled water. A number of small placental fragments having a putrid smell came away. There was also very free bleeding, and the uterus was flabby. Thorough irrigation with very hot solution of Lysol brought about good contraction and stopped the hæmorrhage. At the conclusion the patient was very cold, and collapsed.

Half an hour later, temperature was 101.6°. It fell steadily (really a collapse fall) till 6 p.m., when it was only 99°. Pulse all day, 128-130; respiration, 40-46. She, however, seemed more restful, and her mind clearer. The lochial odour had disappeared.

10 p.m.—Rigor; vomiting; temperature 100°, pulse 130. From now till morning several rigors, and general condition worse.

December 25, 8.30 a.m.—Temperature 101.5°, pulse 120, respiration 40. Lochia again offensive. Uterus flushed with Lysol solution. Diarrhœa present; opium given to control it. There was not any abdominal tenderness or pain worth mentioning at any time.

11 a.m.—Temperature 102·8°, pulse 120, respiration 42. Anti-streptococcus serum again injected, the abdominal parietes being selected. As before, the only symptom which even was temporarily improved was the temperature; all others were unchanged or worse.

Noon.—Temperature 100°, pulse 140, respiration 40.

1 p.m.—Temperature 102·8°, pulse 140, respiration 42.

4 p.m.—Temperature 102·8°, pulse 136, respiration 42. Delirium great, memory almost a blank; euphoria very marked. She wanted to get up and go about her house-work. The milk had quite dried in the breasts; the baby was forgotten.

December 26, 2 a.m.—Temperature not recorded, pulse 136.

8 a.m.—Temperature 102·5°, pulse 136, respiration 46. Intra-uterine injection of Lysol solution. She looked better, mind rational, resting calmly, no delirium.

Noon.—Temperature 104·5°, pulse 140, respiration 48.

1 p.m.—Temperature 105·5°, pulse 140, respiration 48. Although the previous injections of anti-streptococcus serum had apparently done no good, I decided to try a third. I opened one of two fresh tubes. I found it quite impossible to dissolve it. The scales simply swelled until the whole mass formed a jelly. I tried for a long time with a test tube water-bath 100° F., but the coagulum refused to dissolve. Concurrently, I endeavoured to dissolve the contents of the second tube, with a like exasperating result. I then gave the dose *by the mouth*.

The temperature fell to 104°, but pulse, &c., remained unimproved.

4 p.m.—Temperature 104°, pulse 150, respiration 50.

7 p.m.—Temperature 104, pulse 150, respiration 50.

8 p.m.—Dr. Cameron again saw the case with me. We decided to inject a pint of normal salt solution, with the object of diluting the infected blood plasma, as well as to replace in some degree the blood lost in curetting. We injected the solution into the flexor aspect of the left thigh, taking twenty minutes over the operation. The tissues gradually took up all the fluid.

December 27, 8 a.m.—Temperature 103·5°, pulse 140, respiration 48. No fresh rigors. Lochia appeared more approaching normal. As the uterus had been so well irrigated and scraped, I decided not to employ any further intra-uterine medication, as the pathogenic

material had evidently long since passed beyond the reach of any local agent. She complained of stiffness and soreness where the normal solution had been injected, and there was a considerable areola of bruising, although every gentleness had been used during the injection. This I assume was due to the lowered vitality of the tissues. She was well sponged with iced water, and temperature fell to 101·2.

1 p.m.—Temperature 104·5°, pulse 168. Sponged. She had a rigor at 3 p.m.

6 p.m.—Temperature 102°, pulse 140, respiration 38. She was now in a dreamy apathetic condition—indeed all through she had no realization of her peril, and could not understand why she was kept in bed. Several times she was prevented by the attendants from getting up.

From the outset she was a perfect example of Smyly's aphorism, "If a patient with a high temperature look very ill, sleep very badly, but says she is very well, she will probably die."

10 p.m.—Temperature 104·5°, pulse 160, respiration 50.

December 28, 8 a.m.—Temperature 100°, respiration 52, pulse uncountable. Low muttering delirium, and death evidently nigh.

10 a.m.—Died.

In recording this case I have chiefly been influenced by the conviction that I have long held, that to the use of syringes and irrigators by untrained nurses much mischief is to be traced in obstetric cases—death perhaps but seldom, minor ailments often. Popular education lags far behind that of the leaders of progress, and, although in most of the great maternity hospitals of Europe and America routine douching has been abandoned as a work of supererogation, the ordinary monthly nurse, thinking, poor woman, that she is displaying a scientific spirit and following approved professional methods, is more and more taking to its employment. Lacking the technical training, and in many cases the common intelligence, necessary for the appreciation of aseptic methods, she cannot possibly act in this manner without risk to her patients. I take it that it is the duty of us all to instruct the monthly nurses to leave such matters entirely to the hands of skilled accoucheurs.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 27th May, at 8.15 p.m.

Business:—General.

GEO. E. RENNIE, Hon. Secretary.

A CONTRIBUTION TO THE PATHOLOGY OF PURPURA HÆMORRHAGICA.

By J. MASON, M.D. BRUX., D.P.H. CAMB.,
OTAKI, N.Z.

READ AT THE ANNUAL MEETING OF THE N. Z.
BRANCH, B. M. A.

THROUGH a want of expedition on my part in replying to our indefatigable Secretary, I find that what I intended should be designated "A Contribution to the Pathology of Purpura Hæmorrhagica" has been entered on the programme as a paper on the general pathology of this disease. Now, the few remarks which I intend to make on its pathology and treatment are more in the nature of an invitation to you to discuss this child of many reputed parents rather than an exhaustive study of the disease.

I do not ask you to blindly subscribe to my explanation of the genesis of the case which I submit for your consideration, but I opine that at least I am able to show in support of my contention what a lawyer would term "just cause."

The pathology and causation of purpura hæmorrhagica is in much the same nebulous condition as that of what we are pleased to designate hysteria. There are few abnormal conditions to which it has not been ascribed by some writer or another. It has been catalogued in various ways; by the older authors according to the extent and gravity of the symptoms presented, and, later, in respect of its supposed causation. Thus we have purpura simplex and purpura hæmorrhagica. Then we find:—Vascular purpura, toxic purpura, mechanical purpura, neurotic purpura. Now a classification such as this, though far in advance of the older one, is not such a source of satisfaction and help as it would at first seem; and, unless we are careful, we may insensibly elevate a consequence to the dignity of a cause.

Purpura, to judge from the lists given by some authors, would seem to have a fellowship circumscribed only by the various diseases found between the letters "A" and "Z" in a medical dictionary. We find it with such dissimilar diseases as scarlet fever, Hodgkin's disease, and ulcerative endocarditis. Now, while we admit that purpura is an accompaniment and often a consequence of many varied conditions of the body, we have also to remember that it may be a disease *per se*.

Now to bring order out of such apparent chaos can only be done by finding some factor

common to all these varied conditions. Such a common measure is, I believe, to be found in the lessened power of coagulation of the blood, a condition which I have never found absent in any of the cases of purpura which I have seen. Further, as an indication of the direction in which we may direct our enquiry, I would remind you of a fact to which due importance is not always given; and that is, that rapid and great diminution of its coagulability is one of the most constant results of the introduction of bacterial poisons into the blood. Now the consideration of this fact gives us an indication in respect of a suitable treatment, as well as pointing us to a probable cause.

That many other abnormal conditions besides this greater fluidity of the blood may contribute to the purpuric state no one will deny, and hence the value of vaso-motor stimulants like Strychnine; but I maintain that all such conditions are secondary to this alteration in the coagulability of the blood. They are not causes; they may be coincidences or consequences, but never the *causa causans*.

It is not my intention to discuss the pathology of the various diseases of which subcutaneous or subserous hæmorrhages may be a symptom, but rather to ask you to consider, and assay the value of the evidence I will bring forth for the apotheosis, so to say, of purpura hæmorrhagica as a disease *per se*, and that in every such instance the cause of the disease is the entrance into the system of a pathogenic micro-organism.

Now, although the ocular evidence I am able to give you is somewhat of the nature of Mark Twain's demonstrations of the truth of a certain Biblical incident—he had stood on the place where it was said to have taken place—yet I venture to say I'm not violating any canon of logic in coming to the conclusion I have.

A man, previously healthy, suddenly began spitting blood, and within 12 hours he was literally leaking all over. When I saw him, some 30 hours from the onset, the right side of his tongue was one large blood clot, the soft palate presented a greyish, foveated appearance, and blood was oozing from its whole surface as if from a sponge; there were several large, sub-mucous hæmorrhages, and so constant and profuse was the hæmorrhage that he was lying with his face over a basin, placed so as to receive the steady outpour. His body was covered with spots in such profusion that you could not touch normal skin between them. The urine he passed could not be distinguished from blood, and a large quantity was evacuated when bowels were opened.

Altogether the man presented such a set of grave and serious symptoms as almost precluded the possibility of recovery.

He was not a "bleeder," and had never been ill before. After a careful examination, and much questioning, I was forced to the conclusion that his condition could not, with any degree of mental satisfaction, be ascribed to any of the usual so-called causes, and it was therefore with some satisfaction that I was able to discover a wound over the root of his right thumb nail.

This wound presented a peculiarly fungoid appearance, bluish-black, coral-like granulations, bathed in a thin, bloody fluid. The man himself ascribed no importance to the sore, but expressed astonishment at its not healing as rapidly as his wounds usually did.

The history of the wound was as follows: About six hours before the bleeding began, he, while in the act of catching a sheep, was struck on the thumb by her hoof, carrying away about one inch of superficial tissue. I tested the coagulability of his blood, and found it greatly deficient.

I made a great number of cultures, both from the blood of the patient and also from the sore, but I must confess that I was unable to isolate an organism so distinctly of the form and character of that described by Drs. Russell and Watson Cheyne as to preclude any doubt as to its identity.

This much can, however, be said. Micro-organism or microorganisms must have been present in this fluid, which had the power of decreasing the coagulability of the blood, and in one case causing actual hemorrhage.

Through the kindness of a friend of mine, whose opportunities of actual experimentations are much greater, I was enabled to test the effect of my cultures upon some rats and mice, and in every instance there was a marked retardation in the formation of the clot, and in two cases effusion of blood under the mucous membrane of the mouth followed the injection, and in one case actual hæmorrhage occurred.

Now, according to Koch's law we ought to have been able to isolate a specific organism from the blood or tissue of the animals experimented upon, but as the original infection consisted of a congregation we did not proceed further.

I sincerely trust that you may not consider my contribution so slight as to bar discussion, but as so little is known concerning the life-history of the bacillus of purpura hæmorrhagica, I hope I have not unprofitably occupied your

attention in considering the result of the spare time I spent during some three months.

The treatment of this case was based upon its microbial origin, and its accompanying diminution of the coagulability of the blood, and the result eminently justified its use. The exhibition of Calcium Chloride, as is well known, always increases the coagulability of the blood, and this was the treatment pursued, with the result, that within three hours,* the time required for the formation of the clot was diminished by one half.

I may say, that although Calcium Chloride was principally relied upon, I combined its administration with that of liberal doses of Hazeline.

It is never safe to argue from a particular to a general, and it may be that the long arm of coincidence was in operation in this particular instance, but I don't think so.

The sudden onset, the marked alteration in the coagulability of the blood, and the effect of the inoculation upon the rats and mice, go far to convince me of the microbic origin of the disease.

The first number of a new journal, *The Monthly Cyclopædia of Practical Medicine*, is to hand. This journal, which is published in Philadelphia (U.S.A.), is issued in conjunction with "Sajous' Annual of the Universal Medical Sciences." The number before us contains an immense amount of useful information. An excellent editorial on the Treatment of Cancer by Alcohol, by the editor (Dr. Sajous) is well worth reading.

We have received from the publishers, Messrs. Angus and Robertson, two Australian works which have appeared recently. "The Kingswood Cookery Book," by Mrs. Wicken (3s. 6d.), now in its fourth edition, contains very valuable recipes by a practical teacher. These should be in the hands of every nurse in attendance in the sick room, where the ordinary articles of diet are forbidden. "Geography of New South Wales" (2s. 6d.), by J. M. Taylor, M.A., LL.B., is one of Angus and Robertson's Australian School Manuals. In this little work the author deals with the physical features, geology, climate, flora and fauna, aborigines, mines, &c., of the colony. It is well illustrated, but unfortunately wants an index.

CYCLE TRACK CONSTRUCTION.

The question of cycle track construction in Australia may be said to be in its initial stage, although the Austral Cycle Agency have, in a practical way, started the question by an offer to give one hundred guineas towards a track between Melbourne and Brighton. The expense of such an undertaking is plainly one that municipal coffers should be responsible for, because the cyclist pays rates and taxes just as much as the vehicle driver or the horseman. But, although he forms just as important a section of the community, up to date he is scarcely estimated at his proper municipal or parliamentary value.

* In health, coagulation takes place in about nine minutes (M. Vierordt), but in many cases I have seen it take place much sooner.

CASE OF PECULIARLY LOW SPECIFIC GRAVITY OF URINE WITHOUT RENAL DISEASE.

By ARTHUR J. NYULASY, M.R.C.S. Eng., &c.,
PERTH, W.A.

THIS occurred in a fairly well-nourished woman, aged 43 years, on whom I operated on the 11th November, for scirrhus of the breast. On the patient consenting to operation, I sent her to Miss McKimmie's hospital, where examination of the urine gave a specific gravity of 1013. Next day it was 1008, next day 1005, and the next day 1004. There was no albumen in the urine, nor anything else abnormal in connection with it except that it was pale, and the total quantity passed per day small. The day before I decided to operate the specific gravity was only 1004, and the total amount for the 24 hours only 39 ounces, and the colour light. This patient ate sparingly, and lived mainly on tea and bread and butter, and took neither sugar nor milk, and on enquiry I found that on this particular day 35 ounces of tea had been consumed—the little solids taken accounting for the extra four ounces. As I was able to discover absolutely nothing pointing to kidney disease, either in the history, heart and vessels, the eye, or in any other direction, I made up my mind to operate. The patient made a good enough recovery, with the exception of a little suppuration, but she took the anæsthetic (ether and chloroform) badly, so that I was compelled to somewhat curtail the area of operation.

PECULIAR BINOCULAR LAMELLAR CATARACT. (ILLUSTRATED).

By J. LOCKHART GIBSON, M.D. EDIN.,
M.R.C.S. ENG., OF BRISBANE.

READ BEFORE THE QUEENSLAND MEDICAL SOCIETY.

OF the two cases of lamellar cataract which I am showing, one suffered from the usual form of congenital cataract, and in one eye only. The usual form consists of a more or less opaque lamella of lens substance situated somewhere between the nucleus and the periphery of the lens. The only peculiarity in this case was that the affected lamella was uncommonly thick and opaque, giving the boy little more than perception of light. One needling resulted in the slow absorption of the lens, and his corrected vision is now $\frac{1}{2}$, and improving.

To the other case I wish particularly to draw attention, partly because its peculiar characteristics can be clearly demonstrated and partly because I have neither seen nor read of a

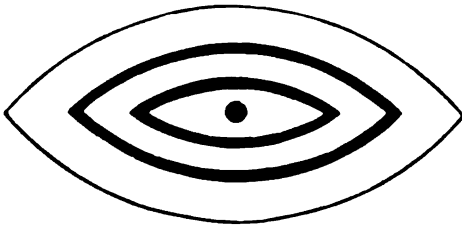
similar arrangement of congenital lens opacity. The arrangement of the opaque parts of the lens substance was bilaterally symmetrical, but the opacity differed in the two lenses considerably in degree.

D. G. C., aged 4 years, seen first, November, 1897; said to have no sight in his left eye and very imperfect sight in his right eye. Observation confirmed this as far as the age of the patient would allow. The lens of the left eye proved on examination to have an uniform very opaque white lamella half-way between the nucleus and the periphery of the lens. The peripheral fibres of the lens were quite transparent, and, as far as could be judged, transparent lens substance existed between this opaque lamella and the periphery of the nucleus of the lens. The peripheral layers of the nucleus formed an opaque white capsule for it, and there was probably transparent nuclear substance between this and the very centre of the nucleus, where a large pin's head sized chalky white nucleolus was situated.

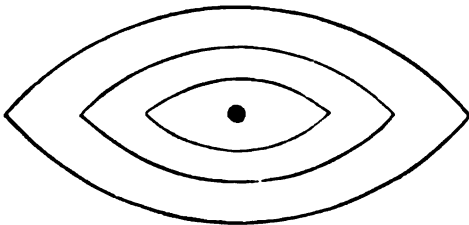
The lens of the right eye proved to have the same structural peculiarities, but the affected parts were thinner and less opaque, except the central nucleolus. In fact the condition of the right lens, together with observation of the left lens during its solution, enabled me to conclude definitely that the above description of the left lens was correct. The left lens has been dissolved as the result of two needlings. A first needling led to the solution of the peripheral clear lens substance. A second needling found that the remaining lens substance (comprising the outer opaque lamella and the parts within it) was very dense, and the needle in tearing it displaced it bodily into the anterior chamber. In the anterior chamber this remaining part of the lens dissolved more quickly than one would have expected from its density, but did so peculiarly, viz., by being gradually eroded and eaten into by the aqueous. When the nucleus was partly eaten up by the aqueous, the central chalky white nucleolus was liberated and dropped to the lowest part of the anterior chamber, where it became wedged between the cornea and iris. Atropin has prevented it from causing irritation, and it has very slowly become smaller by solution. A small pin's head sized chalky looking body can however still be seen. A perfect view of a healthy fundus can now be obtained through a correcting glass (+ 12 D.)

The right eye, which it is my intention to treat in the same way as the left, shows the following appearances very clearly indeed:—A cataractous lamella surrounds and forms a

complete capsule for the nucleus of the lens. This lamella is however translucent. Its periphery shows a few white "Reiterchen." It is quite evident that clear lens substance exists between it and a dense chalky white central body the size of a large pin's head, and looking with the nucleus which contains it, exactly like the nucleolus and nucleus of a large nerve cell. At first sight the lens substance outside the nucleus seems transparent,



Schematic antero-posterior section of lens of left eye, showing nucleolus and the two lamellae of dense opacity.



Schematic antero-posterior section of lens of right eye, showing nucleolus and the two comparatively thin lamellae of opacity.

but very careful oblique illumination shows a very fine and thin cataractous lamella half way between the nucleus and the lens periphery. The central opaque white nucleolus in each of these lenses constitutes the peculiarity which I have not seen recorded. To a superficial examination the appearance suggested posterior polar cataract.

Both boys were born in England, and thus emphasize the fact that congenital cataract is very uncommon in Queensland, and lend support to its suggested connection with rickets, which is also uncommon here.

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THE RADICAL CURE OF HERNIA.

By J. EWART, M.D., EDIN. MEDICAL SUPERINTENDENT WELLINGTON HOSPITAL, N.Z.

READ AT THE ANNUAL MEETING OF THE N.Z. BRANCH OF THE B.M.A.

Most surgeons admit that a satisfactory operation for the "radical cure of hernia" has not yet been devised. At the present time many operations, more or less complicated, are being performed. Some of these give excellent results in the hands of their originators, but fail to give satisfaction to the general body of surgeons. To my mind it seems probable that, in ordinary cases of inguinal hernia, no special operation is superior to any other, but that the simplest methods give as good results, if not better, than the more complicated ones; and that the success of the operation depends not so much upon what method we adopt, as upon the after-treatment which the wound receives.

On perusing the statistics of authorities we find that the percentage of successes, as obtained by various well-known surgeons, varies within the widest limits. Some speak of the operation as almost a certain cure; others say that the operation is useless, and should only be performed in exceptional cases. Most surgeons hold opinions between the two extremes.

To emphasise the difference of opinion on this subject, I will quote a few extracts from well-known authorities. A committee of six American surgeons, who had special facilities for studying the subject, calculated that there was a percentage of failures of about 4 per cent. Treves says that failure in 15 per cent. is a good average; Ball, 30 per cent. Dr. White, of Pennsylvania, says that the general experience of surgeons everywhere is that at least 40 or 50 per cent. of cases operated upon for radical cure suffer from relapses. Dr. Wyeth says:—"I am averse to the operation for radical cure, excepting where strangulation has occurred, or the hernia has become so large that it interferes with the usefulness of the individual. I will never operate in such conditions until I see better results in efforts at radical cure." Ball again says that all operations for radical cure are inefficient. Dr. Mitchell Banks looks upon the term "a radical cure" a misleading one, and the main reason is that the man who gets rupture has naturally a weak and yielding canal or ring, and when you have patched him you can only put him in the same position he was in before the rupture, because he will still be a man with a weak con-

dition of the abdominal wall. With regard to the fatalities after operation, the consensus of opinion seems to be that from two to five per cent. is a good average.

In all operations for the radical cure, we are told that there are two essential points to be attended to—(1) that the sac should be tied high up, or dissected out and bunched up at the internal ring so as to form a pad, and (2) that the canal must be closed by sutures. The means adopted by different surgeons to effect these two essential parts of the operation vary widely, some being most complicated, difficult of performance, necessitating the use of special instruments and requiring considerable time to perform. Others again are simple, easily and rapidly performed, and require only such instruments as are used for ordinary operations. As the results obtained by the simpler methods seem to be quite as good as those from the more elaborate ones, we should, I think, in all cases, select as simple a method as possible. By doing this, not only do we subject our patient to a minimum of risk, but at the same time there is a greater probability of the wound healing throughout by primary union, and so of having a firm barrier which prevents a return of the hernia. I cannot help feeling that the bunching-up of the sac as in McEwan's operation must add considerably to the risks. In the same operation, too, the dissecting out of the whole sac must add considerably to the dangers, for, not only are the surrounding tissues damaged by the dissection, but if great care be not exercised in pulling off the sac from the tunica vaginalis, the scrotum may be opened and the testicle drawn out and exposed. The latter accident, in the majority of cases, gives rise to no trouble, still is not altogether free from danger. Acute orchitis may be set up, and this may subsequently result in atrophy of the testicle. Blood, too, may collect in the scrotum; this is difficult to get rid of by drainage, and, if strict asepsis be not observed, is likely to lead to suppuration and much trouble in the after-treatment. We must remember, too, that a large proportion of relapses after the operation for radical cure occur in cases where suppuration has taken place in the wound, and that this accident is more likely to happen after a complicated than after a simple method.

During the last twelve or thirteen years, I have either myself performed, or have assisted in performing, over 200 cases of radical cure, and have watched the after-treatment of all the cases. The operations were performed by some ten different surgeons, and the methods adopted were various

—McEwan's, Mitchell Banks', Ball's, Barker's, Bassini's, and Bennett's, among others, have all been tried. Excluding cases that were complicated by strangulation, we have not had a single fatality. The cases were not selected ones, and their ages varied from four months to over ninety years.

A large majority of the cases have been performed by Bennett's modification of Barker's operation. In Barker's operation, as you know, the neck of the sac is separated and tied high up the ends of the ligature are left long, and with a needle are brought out through the pillars of the internal ring and abdominal wall and there tied. In Bennett's method, after separating and cutting through the neck of the sac, the proximal edges of the sac are seized with pressure forceps, the finger introduced into the abdomen, a Liston's needle protected by the finger inside is passed through the abdominal wall a little above and internal to the inner ring, down through the neck of the sac, and is made to transfix the side of that sac; the needle is then threaded and withdrawn. The same process is gone through on the outer side, the other end of the ligature being used. A loop is thus made, which is passed over the end of the sac. A ligature is then tied round neck of sac. By pushing up the sac with the finger and tying the ends of the other ligature, the sac is drawn well up into the peritoneal cavity. Other sutures are employed, three or four in number, to draw together the edges of the canal. The lower end of the sac is left to take care of itself, and is not excised. Superficial sutures are used, and drainage for twenty-four hours may or may not be employed. Barker's method has also given excellent results; still I think Bennett's modification is an improvement, as, by it, one is able to invaginate the sac more satisfactorily, and at the same time there is no risk from slipping of the ligature.

With regard to the materials used for ligatures and sutures, silk is probably the best for the loop ligature, and, in order to prevent its cutting the skin between the points where it emerges from the abdomen, it may be tied over a small pad of antiseptic gauze. This ligature may be left *in situ* for a fortnight and then removed. For the ligature of the sac, and for all buried sutures, chromicised catgut boiled in alcohol under pressure, and preserved in sublimated alcohol, gives the most satisfactory results. Silk and silk-worm gut should, I think, not be used, as they frequently give rise to trouble. It is not unusual for the wound to heal by primary union, but, after the patient begins to go about

(it may be months afterwards), suppuration, followed by the formation of a sinus, develops. This may go on discharging for months, and may necessitate a cutting operation to remove the sutures. This I have seen to follow the use both of silk and of silk-worm gut.

During the last few years, several cases of strangulated hernia and a few ordinary cases have been operated upon by a very simple method. After freeing the neck of the sac, this is simply ligatured as in Barker's method, and buried sutures are used to draw together the edges of the canal. This, as you will see, is as simple an operation as can be performed, and with us it has given the best results; in not a single case has there been a relapse. In this operation the risk to the patient is reduced to a minimum. In strangulated cases, where, as Treves says, it is of the first importance that the operation should be performed rapidly, this is the method which should, I think, be adopted in nearly every case. It is also worthy of a further trial in ordinary cases. I very much doubt whether the sewing together of the pillars of the ring has any effect in preventing a return of the hernia. By simply tying the neck of the sac and the employment of superficial sutures, good results have been obtained as regards a radical cure. Then, if in addition to this we invaginate the sac into the abdominal cavity, we ought to have still better results.

The chief causes of failures after the operation are, I think, due to errors in the after-treatment, more especially to the patient being allowed to get out of bed too soon. Treves says that the patient may be allowed to get out of bed as soon as the wound is healed. A fortnight is usually sufficient for this, but can we expect the parts to be thoroughly solidified in this time? I think not. Other surgeons keep the patient in a recumbent position and in bed for three weeks; very few keep them longer than this. In the Wellington Hospital, we make it a rule never to allow a patient to sit up in bed even earlier than a month, and in many cases we keep them much longer—six or seven weeks, or even more. During the whole of this time, they are kept lying on their backs, with knees bent on abdomen and firm pressure by pad over the wound. The firm pressure, flexion of thighs, and complete rest, will, I think, do more to promote a radical cure than will deep sutures, twisting or bunching of the sac, the suturing of the conjoined tendon to Poupart's ligament, and other such-like manoeuvres. Particular care is taken to prevent injury during the use of the bed-pan; the patient is

carefully lifted on to it, and every means taken to prevent straining. If flatulence follows upon the operation, the use of the rectal tube is of the first importance. On first getting out of bed the patient is not allowed to walk about, but is kept for at least another week in a chair. He is then allowed to walk about, but advised not to do any work for three months. During all this time he is expected to wear a pad and bandage.

There seems to be much difference of opinion as to whether a truss ought, or ought not, to be worn after the operation. Some recommend the patient to wear a truss for the rest of his life; others employ it for a few months only. Many believe its use to be altogether unnecessary or even harmful by causing atrophy of the muscles of the abdominal wall. Some years ago all our hospital cases were recommended to wear a truss with a very light spring for a year. If, at the end of that time, there was no tendency to a relapse, its use was discontinued. During the last three or four years the wearing of a truss has been seldom recommended.

I am in the habit of requesting all patients to report their condition to me six, twelve and eighteen months after operation. Many do not report themselves, yet a large proportion do; and I know of only five cases in which the condition has relapsed. Very probably there have been others, but I know of only these five. In two of these cases the patients had themselves to blame for the result; in both the wound healed well, and, as the patients felt quite well, they refused to remain in bed, and left the hospital on the fifteenth and sixteenth days.

The operation for radical cure should not be performed upon children unless in very exceptional cases, so authorities tell us. I think this is a mistake. If the hernia be large it should be operated upon at once; if small, use a truss for a year, and after that, if there be no improvement, operate. Children's cases give excellent results. Soiling of the dressings with urine is the chief difficulty we have to contend against, but harm from this can be prevented by applying a collodion dressing. As showing what children can stand in the way of radical cure, I will give you a few particulars of a case now in the hospital. The child, who is aged fifteen months, was admitted for ectopia vesicæ. No urethra, and only half a penis—the lower half. He had also a hernia on the right side about the size of an orange. On several occasions the hernia came down, and I had much difficulty in reducing it, always

having to use chloroform. On the evening of the 12th October last the hernia came down. As I was unable to reduce it, I advised operation; but to this the mother refused to consent. Sixteen hours afterwards Dr. Martin operated. Upon opening the sac, he found the contained bowel very much congested, almost gangrenous. The vermiform appendix, which was the first thing to present itself, was very dark, and was removed. The testicle also presented itself, and this he also removed. After reducing the intestine, he tied the neck of the sac. No deep sutures were introduced. During the whole time that the operation was going on, urine was trickling over intestine and wound. In spite of all this, healing took place by the first intention, and the temperature never rose above the normal. The child is now quite well as regards the hernia, and Dr. Martin intends shortly to attempt the formation of a bladder and urethra.

We are also advised not to operate upon very large herniæ of long standing, because the abdomen has not sufficient capacity to contain the intestines, and, consequently, that such cases always relapse. In opposition to this, I may mention a case of double hernia which some four years ago was admitted under Dr. Collins's care. The herniæ were so large that the patient's condition was pitiable and worse than any I have ever seen. He was quite unfit for work of any kind. Dr. Collins first operated upon the left side. On opening the sac, adhesions of the bowel to it were found everywhere. After dissecting these out, he had very great difficulty in reducing the contents into the abdominal cavity. He ultimately succeeded, however, and the case did well. About a year afterwards, the late Dr. Whitehead operated upon the other side, met with the same difficulties, but also succeeded; and the case again made a good recovery, with the exception that some of the deep sutures gave rise to trouble and had to be removed some months later.

FOREIGN BODIES IN THE AIR-PASSAGES.

By JOSEPH C. VERCO, M.D. LOND., ETC., ADELAIDE, S.A.

A GIRL, *æt.* 3, inspired a watermelon seed on March 20th. She was brought to see me on March 29th, 1890, with a strangling cough like whooping-cough. I advised tracheotomy, but it was declined. Three weeks after, on April 17th, consent was given. Dr. Hayward administered an anæsthetic, the trachea was

opened, and with the first violent cough the seed was expelled. The patient progressed satisfactorily, and was soon quite well.

A boy, nearly three years old, inspired a watermelon seed on April 25th, 1890, and was at once affected with some laryngeal stridor and a moist wheeze. Recognising a lodgment of the foreign body in the larynx, I proposed tracheotomy and removal; but on April 28th a medical man, who was called in consultation, counselled temporising. I saw him four times afterwards, on the last occasion on May 10th; but, as medicines were useless and nothing was to be done, it was needless for me to see him further. Soon afterwards the stridor disappeared, but the child was left with a cough, accompanied with a "flipping" sound, attributed to the knocking of the seed against the walls of the larynx. On September 25th he had a fit, but was running about on the 26th. On the 27th he was feverish; on the next day I was called to see him. He had then P. 136, T. 102.2°, and some impaired resonance at the right posterior base, with weak breath-sounds. On the 30th, T. 101°; on October 1st, T. 98.4°, P. 116, R. 28. On October 4th, T. 99.4°, feeling fairly well, going about the house. October 6th, impaired resonance in the right back from the angle of the scapula downwards; from the spine outwards as far as the angle of the scapula to the extreme base there was resonance, but through the right lateral region below the level of the fifth rib it was impaired; the respiratory murmur was weakened though audible, and the vocal resonance was much reduced. He had severe fits of coughing every evening about ten o'clock, but there was no "flip" with it. October 10th, the father called on me at night to say the boy had just had a severe fit of coughing, as though he would choke. While the mother was giving him some hard slaps on the back, he called out, "There's something in my mouth," and spat out the melon-seed with a clot of blood. The chest-signs gradually and completely cleared up.

In this case, the foreign body was in the air-passages for more than five months. At first, for about three weeks, it was engaged in some way in his larynx, probably fixed cross-wise below the vocal cords, so as to occasion a stridor and slight wheeze without affection of voice. Then it became free, and caused paroxysms of cough attended by a flipping sound, due to the carrying of the seed up and down the trachea. Still later, in September, it became fixed again, probably endwise, in one of the branches of the right bronchus, going to the base of the lung, and here it set up some

inflammatory mischief, with perhaps collapse. The coughing induced by the pneumonia shifted the seed, and by a fortunate accident it was coughed through the glottis. The inflammation set up by an aseptic body was not of a virulent character, and soon subsided. My opinion was at the time, and still is, that the best thing was not done. I think the trachea should have been opened, and the seed would probably have been felt in the larynx from below and could have been removed by forceps. Fortunately all ended well.

Mrs. S., *æt.* 27, consulted me on May 3rd and 10th for cough supposed to be influenzal. She was next visited by me on May 18th, having been laid by for two days. After this, she was up and about, and was not seen again till May 23rd, when she was in bed and feverish. On the 25th, her temperature was 104.2°; a pain in the right back had come on at noon, and some dulness with leathery friction were detected. She was given a mixture of morphia and acetate of ammonia, squills and liquorice. The next morning her T. was 101.2°, and at night 103.2°. She had a harsh cough with very little sputa, the pain had gone from the back, P. 120, R. 26. May 27th, T. 100 to 102.8°. 28th, P. 120, R. 24, T. 100.4 to 102.8°. 29th, P. 120, T. 99.6 to 102.2°. 30th, T. 98.4 to 102.6°. On this day I obtained a fuller history. She had come to Adelaide from the country on April 28th, 1890, and after about a week contracted influenza, which began with cough and headache, followed after two or three days by faintness which compelled her to take to her bed. She lay there three days with a bad cough, but with no aching in the legs or back. The cough subsided, and she was quite free from it for a week, and felt quite well until she went to a dentist on May 16th and took gas to have some teeth extracted. When she recovered consciousness, she had a bad cough, and was bathed in perspiration, and the cough has never left her since. May 30th, 9 a.m., P. 112, regular, soft, small; R. 28, easy; tongue, thin moist fur, little dry herpes at the right corner of the mouth on both lips. Over the right back slightly impaired resonance below the spine of the scapula, dull below the angle. Vocal resonance increased down to the angle; below this weaker, but equal to that on the left side. Respiratory murmur relatively weaker over the impaired area; below the angle very weak and slightly whiffy and bronchial. Vocal resonance diminished at the right base. The cough during last night has become loose, and the sputa abundant, frothy, and muco-purulent.

May 31, T. 98.6 to 103°, P. 104; much sputa till 7.30 a.m., since then very little. 1-6-90, T. 98.4 to 100.2°, P. 104; slept well, no pains, cough easier, sputa less. 2-6-90, P. 100, T. 100.2 to 98.6°; sputa scanty; the impairment of percussion is diminishing, and a boxy, dull, tympanic note is replacing it; the respiratory murmur is still weak, but the leathery friction rub is becoming more marked, and is extending towards the base from above; cough dry, harsh, and laryngeal. 3-6-90, T. 99.2°. 4-6-90, T. 99.2°. 5-6-90, T. 98.4°. 8-6-90, the temperature has not risen above the normal since last note; allowed up. 11-6-90, still confined to the bedroom; has a cough, which is worst about 10 p.m. and 5 a.m.; very little expectoration; no pain, except that the back aches, more when lying in bed than when up; there is still a little dulness at the extreme right base behind, with a high-pitched tympanic note just above, and some weakness of the respiratory murmur. She regained her strength, and came to see me at my rooms, her only complaint being a distressing cough which seized her in spasms, like the whooping cough, and threatened to strangle her. I could find no explanation for it. It was treated with various expectorants and sedatives, without avail, and even treatment for stomach cough, that "asylum for the ignorant," was no more effective; so on July 28th she was advised to return to her home in the country. The theory had been, first, an influenza with recovery; then tooth extraction, with irritation of the bronchial mucous membrane by the inspired gas, and perhaps some blood, consequent bronchitis, followed after a week by pleuro-pneumonia, and, when this had cleared up, by some form of irritable bronchial catarrh. After she had been home some time I received a note from her husband to say she coughed up a tooth on August 5th. This had remained in her passages from May 16th till August 5th—nearly 12 weeks. It would seem to have early become engaged in one of the smaller tubes going to the lower lobe of the right lung, and to have excited the local pleuro-pneumonia, to have been loosened by the cough, and acted as a foreign body, occasioning the strangling cough, until at last it was happily expectorated. While she was up and about, the weight of the tooth kept it in the smaller tubes; when she lay down it was more easily coughed up into the larger and more sensitive ones, and even into the larynx, and hence the paroxysms of cough soon after going to bed and before rising in the morning.

On March 22nd, 1893, I saw, in consultation with Dr. Corbin, Mrs. B., a woman aged 39.

She was fairly well on September 15th, 1892, when she had her teeth extracted under gas, and the same day got a very severe cough. The sputa had a bad odour, and the patient affirmed that a tooth had gone into her wind-pipe, and she could taste the bad tooth in the phlegm. When first seen by Dr. Corbin, there were signs of some consolidation of the right lung in the supra-scapular region. One day, about three weeks afterwards, she coughed the tooth up. It was a root with the crown gone and somewhat eaten out. Then she improved considerably. But in January she began to get bad again; cough came on with abundant muco-purulent sputum, and very fetid odour. She has lost much flesh since. Now there is a little crepitation over the right upper anterior chest, and either dry rale or friction about the nipple and through the middle lateral region. In the right interscapular region, from the spine of the scapular nearly to its angle, there is impaired percussion resonance, bronchial breathing, and exaggerated vocal resonance. The diagnosis was "probably some ulceration of a bronchus into an abscess cavity surrounded by consolidated lung, and with adjacent capillary bronchitis." As to treatment, the decision was that "if treated by tonics and the inhalation of disinfectants, as at present, she will probably continue to fail. She might be put under ether and be aspirated in the right back, and if pus or foul air were found, have a rib excised and the lung drained." Dr. Corbin has kindly informed me that she was sent into the private hospital with a view to incision and drainage, but as she had some severe bedsores, operation was postponed while these and her general condition were being improved; but on April 7th, she was suddenly suffocated by flooding of her bronchi with pus from bursting of a collection of matter, either in her lung or in her pleural cavity. Here there was a sojourn of the tooth in the air passages for three weeks. But its expulsion did not end the trouble; a septic inflammatory affection had been set up in the lung tissue of the upper lobe, and the upper part of the lower lobe, which resulted in the formation of an abscess. The persistence of the disease after removal of the foreign body was probably due, as Dr. Corbin has suggested, to inoculation with the organism associated with dental caries, for the expectoration had always the odour resembling that of decayed tooth, and to the patient a similar taste.

My cases suggest one or two additions to the information supplied in the able and interesting paper of Dr. Lendon. Thus he writes: "If the obstruction be partial . . . the

resonance on percussion will not be lost, but only diminished." It might be added "and it may be quite unaltered"; for if the foreign body, as a melon seed, is edgewise on, though it offers some obstruction to the entry of air, it does not effect appreciably the state of the lung substance. I would suggest also that the idea of a fixed body is perhaps too predominant, so as to overshadow the notion of a free one. In three out of four of my cases the excursions of a free body appeared to be the chief cause of distress, and, as Dr. Lendon remarks, this resembled whooping cough more than anything else. I should be disposed to emphasise this rather more strongly; so that, given an inexplicable case of pertussis like cough, a careful enquiry should be instituted for a possible foreign body, and especially in grown-up people for an immediately associated history of tooth extraction under an anæsthetic.

My third case provides an instance of a course of events not referred to by him. The stage of inflammation came early and passed quite away, and left a stage of irritation to continue for eight weeks afterwards. It indicates that the "stages" enumerated by Dr. Lendon do not necessarily follow one another in consecutive order; that the stage of inflammation may not be followed by septic infection, even though the foreign body remain; nor is the inflammation terminal, even though no septic infection ensue; but that a long period of "irritation" may succeed the subsidence of the inflammatory mischief. It shows also that such a septic substance as a decayed tooth may excite a not very virulent inflammation, and this may wholly subside, even though the exciting cause may remain.

As regards treatment, if the foreign body is known to be in the trachea or bronchi, tracheotomy should be performed at once, and then by inversion and other means its extrusion be attempted. As long as this is not done the patient is in danger of sudden death, is liable to extreme distress at any moment, and to the supervention of inflammation. If a pleuropneumonia has arisen, treat expectantly as long as the sputum is not fetid, and there is no suspicion of pus formation; the inflammation may spontaneously resolve. If the expectoration become foul, and the persistence of pyrexia or other signs suggest pus, aspirate; if pus or fetid gas be withdrawn, resect a rib, and open the pleura or incise the lung as may be required.

WANTED, Set of O'Dwyer's Intubation Tubes. Must be Cheap. Apply office of this paper.

A CASE OF HYDATIDS.

By J. A. G. HAMILTON, B.A., M.B., T.C.D.,
ADELAIDE, S.A.

THERE are, I think, a few points of interest in the following rough notes of a case of hydatids which I venture to bring before the Society this evening.

J. R., aged 34, farmer. On March 6th, 1893, he was first operated upon by Dr. Glynn, at the Kapunda Hospital, for an enormous hydatid cyst of hepatic origin, filling the greater part of the abdomen. The cyst cavity was drained in the usual way, but did not close up until July 6th.

I first saw him in August, 1895. He then presented a scar in middle line of abdomen, extending from an inch below umbilicus to pubes. In the middle of the scar was a post-operative hernia, evidently where the drainage tubes had been. On examination, a tumour about the size of two fists was felt in the abdominal cavity, freely movable.

Operation August 25, 1895. An incision was made through the old scar. A pedunculated hydatid cyst was found attached to the great omentum by a thin pedicle. The pedicle was ligated with kangaroo tendons, and the cyst removed. The muscle and tendon were dissected back, freshened, and brought together so as to close the hernia. He presented himself again in March, 1896, complaining of a cough, spitting of blood, &c.

On inspection: Right side of chest distinctly bulging, most distinct from nipple line to costal margin. Left lobe of liver enlarged and prominent. Posteriorly the breath-sounds could be heard at the base, but loud and harsh. Anteriorly, the breath-sounds were of the same loud character, as if the lung itself was compressed. *Operation* March 26. A little clear hydatid fluid was obtained from the liver with an exploratory needle. An incision over this point gave exit to a little fluid and few pieces of broken-down bile-stained cyst wall. An exploratory needle was then inserted into pleural cavity, and some clear fluid drawn off, and portion of the eighth rib was resected. The lung was found pushed up, but only a small quantity of fluid and a few daughter cysts escaped. No parent cyst could be found in either incision. Both openings were drained in the usual way. Subsequently a large parent cyst and several daughter cysts escaped from the pleural opening. He made a somewhat tedious recovery. The pleural opening did not close for nearly nine weeks. On May 13th, the abdomen was

again opened, with the object of closing the post-operative hernia, the former operation having failed to close the opening. There were no intestinal adhesions to the abdominal tract, and no hydatid cysts could be seen or felt in the cavity. He left the private hospital on June 9th.

He came down again in March of this year, complaining of a swelling in lower part of abdomen. On inspection, the whole of his pelvis was filled by a rounded swelling, extending half way up to umbilicus, but more prominent to right side.

Operation, March 17, 1898. The hernia operated on 20 months before showed firm union. Four silkworm-gut sutures were found embedded and unaltered in the cicatrix. A cyst, about the size of a small football, was found in the right lower quadrant of abdomen. The capsule, although not thick, was tough and leathery, with a smooth, pinkish inner surface. It was not adherent to intestines or abdominal wall. It contained one large parasitic cyst, with clear fluid. Whilst debating the advisability of applying Bond's operation, an irruption occurred of vesicles from an unsuspected subjacent pelvic cyst, accompanied by thick puriform fluid and some of the gelatiniform remains of a large mother cyst. Further inspection disclosed a thin-walled cyst, about the size of a cricket ball, developed in the splenic flexure of the great omentum. This was dissected out with its capsule, a few bleeding points requiring ligature with fine wallaby tendon. The incision was now extended upwards, and a cluster of omental vesicles, about the size of small grapes, found above umbilicus. This was extirpated *en masse*, and the resulting omental stump tied off in three portions with wallaby tendon. The abdominal cyst cavity measured seven inches in depth. Its capsule was stitched to lower end of wound, and lightly packed with iodoform gauze. The cavity was daily washed out with sterilized saline solution, injected with iodoform emulsion, and lightly packed with iodoform gauze. It contracted and completely healed, *without suppuration*, in 31 days.

The points of interest that struck me in this case are:—

1. The number of operations the patient has required.
2. The absence of any intestinal adhesion, although the abdomen had been opened four times.
3. The fact that this large cyst cavity contracted and healed up *without suppuration* in 31 days.

We have all had experience of the tedious way in which these big cavities heal up when treated with drainage tubes, generally accompanied by considerable suppuration, and its attendant risks and discomforts to the patient; but in this case the patient never had a rise of temperature, his appetite and general condition were good all through. He was able to get up and go into the garden at the end of the third week, and return home with the wound completely healed on the 31st day, showing a marked contrast to his convalescence after the two former operations, when the cyst cavities were treated by drainage tubes and allowed or encouraged to suppurate.

For some time back I have used sterilized iodoform gauze as a drainage material, in preference to rubber or glass tubes, with very satisfactory results. Cavities drained with it appear to contract much quicker, and generally heal without suppuration. Some authorities maintain that suppuration is a necessary part of the healing of an hydatid cyst cavity, but my experience in this case teaches me that it is neither necessary nor desirable.

THE USE OF THE URETHROSCOPE.

By P. CLENNELL FENWICK, M.B. LOND.,
M.R.C.S., L.R.C.P., CHRISTCHURCH, N.Z.

READ BEFORE THE CANTERBURY SECTION B.M.A.,
N.Z., MARCH 10, 1898.

SOME months ago, I had the honour of advocating before you the claims of the cystoscope, (see *A.M.G.*, September 20th, 1897), and I now wish to call your attention to the urethroscope.

This instrument, with which you are all familiar, has lately made rapid strides in improvement, and I lay before you the older and the latest patterns. I need not detain you with a long technical description, but will content myself by pointing out the prism and the air-pump. The addition of the latter has greatly facilitated the inspection of the canal; formerly, the observer's view was limited to that part of the mucous membrane which blocked the distal end of the canula, but with the assistance of the air-pressure we have a long section of the distended canal opened to our inspection. Here is a rough model of the urethra. On passing the instrument, we merely see a small part of pink mucous membrane bulging into the canula; but, when we turn this tap and admit air under pressure into the urethra, we see the mucous membrane unfold, and a long tight tube of urethra is now in view.

I think that few will deny that the finest and most cultivated tactile sense must prove inferior to the superior diagnostic power of the eye; and, whilst the cultivation of manual dexterity is of the utmost importance in this class of practice, the power given to us of actually seeing the condition of the disease which we are combating is of immense assistance to our diagnostic skill.

I have here roughly-constructed models of six urethrae, and will first draw your attention to No. 1, in which I have endeavoured to portray the appearance of that unhappily rare condition (I speak as a general practitioner), a healthy or "virgin" urethra. You will see a tube lined with shining smooth mucous membrane of a pink colour, beneath which ramifies an immense number of capillary vessels. On inflating the urethra, these vessels disappear, and the colour pales. On allowing the air to escape, the colour returns, and the vessels re-appear. Now suppose that this patient has suffered from an attack of urethritis, we shall find some traces left behind. On pumping in the air, the colour will fade as before, but in certain parts patches of colour will remain, these being due to areas of congestion in which the vessels are not emptied by the air-pressure. In other parts, the epithelium has become injured and no longer reflects the light; thus these portions stand out in contrast to the rest of the shiny tube. The glands of the urethra are shown here, in the "virgin" canal; they appear as red sunken pinheads, but they are rapidly altered by inflammation, and, after an attack of urethritis of more or less severity, their aspect varies from spots surrounded by a pale blush to that of whitish seeds scattered along the walls of the canal. In the latter condition they are easily seen, and it is not difficult to connect a sudden relapse on the part of an apparently cured patient with their sudden rupture and discharge of their contents.

You may remember Ricord's idea of future punishment. It was to be eternally surrounded by a crowd of gleet-stricken patients, all begging him to cure them. Most practitioners can recall more than one patient over whose cure they have exhausted all their ingenuity and most of the pharmacopoeia. In cases such as these, the urethroscope will often show us a patch of inflammation lying hidden under a flap of mucous membrane, which had protected the underlying part from the action of the various injections. On admitting air, the flap is pressed back, and local application can be made with success. The appearance of the canal in chronic gleet is characteristic. The

shining aspect of the mucous membrane is gone, the surface is dull and covered with a moist secretion, and the vessels do not readily empty under air pressure.

In the next model, I have endeavoured to show the appearance of stricture. You will see at the bottom of the canal a thin dark crack, surrounded by whitish fibrous-looking mucous membrane. Above this, I have manufactured a false passage with blood-stained mucous membrane all round it.

In the next model you can see certain whitish patches of infiltration, which mark the first appearance of stricture. Although this instrument is of little use in the treatment of stricture, it enables us to tell our nervous patient that he has *not* a narrowed canal; and the relief to such subjects is of no little value in assisting the cure of a hypochondriac.

In this other model I have shown certain bands of fibrous tissue which appear on distension of the urethra, and which, to the inexperienced eye, simulate a stricture. The differential diagnosis is easy, as *these* bands disappear when the air-pressure is relaxed, whilst the stricture remains in stubborn evidence.

The last model is constructed to show the constrictor urethrae. You see the bottom of the canula blocked with folds of mucous membrane; by gradually increasing the air-pressure, you see these folds give way suddenly and then re-appear; the patient at this moment exclaims forcibly that you are pumping air into his bladder. I have here painted a patch of granulation near the meatal end of the tube; it looks like a tiny patch of velvet, and is a constant source of trouble until detected and cured.

The air-pressure should not be used under certain conditions, viz., if it has been necessary to enlarge the meatus to pass the canula, in cases of recent urethrotomy, or where a false passage has been lately made. In such cases, there is a distinct danger of forcing air into the cellular tissues, and this should be avoided by removing the air-pump. In acute cases of inflammation it is not wise to introduce the instrument, and here we should wait till the subsidence of the symptoms before examining the canal.

In conclusion, I will show you a specimen of a foreign body in the urethra under the light, and you will see how easy it is to locate and remove it. I trust I have said enough to convince you of the practical utility of this instrument, whilst you can easily see that only a little practice is necessary to make one a skilful observer.

PROCEEDINGS OF BRANCHES.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting of the Victorian Branch was held in the rooms, Collins Street, on Wednesday, April 27th, at 8 p.m. Present: The President (Dr. McAdam, in the chair), and Drs. Meyer, O'Sullivan, Springthorpe, Stawell, Syme, C. Ryan, Hamilton, Kent-Hughes, Bird, Gertrude Halley, Lilian Alexander, Helen Sexton, Buchanan, Andrew, Cuscaden, Lawrence, O'Hara, Stirling, Vance, Hutton, Nyulasy, Henry, Sutherland, Martell, J. R. M. Thomson, and Hodgson.

The minutes of the previous meeting, as reported in the *Gazette*, were confirmed.

EXHIBITS.

J. W. SPRINGTHORPE, M.D., shewed four round worms passed dead during a typhoid attack. Patient had been on milk diet for some 10 days, digesting it uncommonly well, when a severe relapse occurred with hyperpyrexia, but without further signs of severe toxin poisoning. After 36 hours' dieting with the sterilized malt extract, he had an intestinal hæmorrhage, and passed three round worms with a number of clots, and 24 hours later he passed a fourth with fresh clots. The bowels were locked up for five days, when a rise in temperature and some distension led to their being opened, and the passage of a large foul-smelling blood stool. Since then the bowel has been slowly healing, with several recrudescences. Enquiry disclosed the fact that ten years ago patient had vomited a round worm after a blow on the stomach, and that brewers are in the habit of using malt for the destruction and evacuation of worms in horses. The only record of a similar case Dr. Springthorpe had so far found was in the *B.M.J.*, September 24th, 1892, where one round worm had apparently caused some diarrhoea and a relapse, and the statement in the same journal a fortnight later that the voiding of one or more worms took place very commonly during any continued fever amongst the Chinese, who are very liable to such worms. Such, however, has not occurred in our limited experience. Dr. Springthorpe also shewed two charts illustrating the unreliability of the Widal reaction. Both cases reacted, one having had a very severe attack of typhoid twelve years ago, the other having no recollection of any attack. The former was a case of acute gastro-enteritis from meat poisoning, the latter apparently a simple pharyngitis. Neither had any signs or symptoms characteristic of present typhoid, and both were put straightway on calomel, mag. sulph., and solid food, and allowed to get up and walk about without any bad results. The reaction in the second case was probably due to a previous mild unrecognised attack, though a very mild present attack was not impossible.

HERMAN LAWRENCE, L.B.C.P., exhibited a patient (female), aged 14 years, suffering with tuberculosis of the pharynx and skin. The history of the case, briefly stated, is as follows:—When the child was nine years of age, her throat became ulcerated, and continued to be sore and ulcerating in spite of varied treatment for three years, when the condition began to improve gradually. At eleven years of age, the child's skin became affected. Two or three small raised patches of inflammation of the skin, starting upon either cheek, later on spreading across the bridge of the nose. At various times the patches have become markedly inflamed and ulcerated. Present condition—the soft palate, dorsal surface of the tongue and tonsils

have all become cicatrised together; in fact, the opening into pharynx is only large enough to admit the end of the index finger. There is still some superficial ulceration about the cicatrix, the buccal mucous membrane, and upon the inside of the lips. The skin of the face presents cicatricial tissue and lupoidal-looking nodules, with a slight amount of scaling over both cheeks, upper lip, and nose. She has the so-called button nose, the result of past ulceration. There are also two similarly-affected, suspicious-looking patches of the skin upon the body; one patch is situated over the right shoulder, and the other patch upon the external surface of the left thigh. The case is a very interesting one, and especially so on account of the lupus having apparently started in the soft palate, it being at least two years afterwards that the skin became affected. Dr. Kent-Hughes, who examined the throat, is of opinion that the stenosis of the pharynx is the result of past tubercular ulceration, and has recommended a plastic operation to remedy the threatened closing of the passage from the mouth into the pharynx. Since exhibiting this case, Dr. Springthorpe has kindly injected the patient with tuberculin, the result of which was a typical tubercular reaction in the skin of the face, patches upon the body, and also, in lesser degree, of the mucous membrane of the mouth and pharynx, the child's temperature, previously normal, rising to 103° F., with a pulse of 150.

Mr. O'HARA exhibited a large hydrocele which he had dissected out without puncturing.

NOTES OF A CASE OF TEARING AWAY OF THE URINARY BLADDER FROM ITS PELVIC CONNECTIONS.

By F. BIRD, M.B., MELBOURNE.

THE treatment of rupture of the urethra has been definitely settled in the very large majority of instances. The substitution of a surgical incision for the laceration in the urethral wall, whether a catheter can be passed or not, is based upon the soundest surgical principles, and the suturing of the urethra, though not always practicable, undoubtedly minimises the subsequent stricture. Moreover, it is now proved that immediate union may take place in a sutured urethra and the perineal incision. The case I now relate, however, belongs to a class very much rarer, very much more difficult to treat with success, and one in which the rules for surgical guidance have not been laid down with such exactitude. On August 11th, 1897, a healthy lad, *æt* 19, was thrown from his horse in the bush. Some hours afterwards he was found, suffering from concussion of the brain. He was taken home and recovered consciousness, but attention was not drawn to any urethral or bladder injury until the bladder became distended, when complete retention was found to exist. On examination, there was no bruising in the perineum, no tenderness, no fulness, no indication whatever that the perineum had been subject to violence. There was no bleeding from the urethra, but a catheter at once drew blood, and no attempt, even under chloroform, succeeded in withdrawing urine. Dr. Stewart, of Walhalla, under whose care the boy was placed, then aspirated the bladder above the pubes, and drew off a large quantity of urine. The next day the patient was brought to Melbourne. Shortly after his arrival I operated, with the assistance of Drs. Stewart and Buchanan. Even then there was no bruising, tenderness, or fulness in the perineum. The urethra in the region of the bulb was first opened,

but the exploring finger failed to find even a far-off roundness indicative of the bladder, which was grossly distended and situated far up in the abdomen. Further cutting revealed a torn triangular ligament and a traumatic cavity behind and below the pubes, but not the slightest indication of the distended bladder was even now revealed. I then opened the bladder through the abdominal wall, letting out a large quantity of urine, and found that practically all the structures which anchor the bladder to the pelvis had been torn away. Several fingers could be freely passed from above behind the pubes into the perineal wound. The pubo-prostatic ligaments had disappeared, and two small thin shells of bone were discovered pulled off the pubes, I believe by the levatores prostatae, the floor of the pelvis in this position being deficient. With the aid of the finger in the bladder, the remains of the membranous urethra were found as a small tuft on the anterior portion of the prostate, which was poorly developed. The lumen of the tube was tightly closed by spasm of the muscular fibres, producing complete retention. It was impossible to pass a catheter into the bladder through the prostate, so it had to be passed from within the bladder. The parts were now carefully cleansed of blood, debris and urine, a rubber catheter was passed through the abdominal wound, through the bladder, through the torn membranous urethra, and out through the perineal wound. The cave of Retzius and the space produced by the injury behind and below the pubes were carefully packed with gauze round a drain tube. This gauze was not removed for three days, during which time urine passed both ways, most of it suprapubically. After the removal of the gauze, the subperitoneal tissue was repacked very lightly, and after a week, when the parts were in an agglutinative state, the packing was discontinued entirely. A catheter was now passed through the penis into the bladder, with difficulty, under chloroform.

Suture of the bladder to the divided end of the bulbous urethra was out of the question at any time, as at the time of operation the distance between these points must have been over three inches, and afterwards, though they became approximated much more closely, the indications were against late suture.

The case progressed favourably. At no time was there cellulitis in the sub-peritoneal tissue, neither did an abscess form anywhere, but there was a good deal of cystitis, and after the catheter was left out, on this account, there was retention of urine and great pain in endeavouring to pass it; the upper wound was several times reopened during these spasmodic attacks. A silver catheter was passed every day for several months, and now micturition is perfect, and a No. 10 passes into the bladder with ease. The patient says he feels as if nothing had ever happened to him.

Considerable anxiety was caused during convalescence by the occurrence of several rheumatic attacks, which I feared might be of a pyæmic nature, but nothing came of them. The cystitis was treated by filling the bladder with a solution of Condy, and allowing the patient to void it himself after some minutes—a method suggested and used by Reginald Harrison, and which I have found of the greatest service in inflammatory conditions of the lower urinary tract. In commenting on the symptoms exhibited in this case, I may mention that Morris says that in those cases in which the urethra is torn asunder, all the classical symptoms are pronounced, viz., free urethral hæmorrhage, total retention of urine, and a large perineal swelling. Here two of these three were absent, while retention of urine was, from the condition

of the parts, a necessity. In complete rupture, retention is very generally seen, but not in all cases, for Pearce Gould, in March, 1898, refers to the case of a lad, who, though his urethra was proved to have been completely divided, passed water without difficulty for three days afterwards. If retention had not existed in my case, there would have been much liability to falling into the same mistake in diagnosis as is graphically recorded by Herbert Page, in the *British Medical Journal* for 1896. In his case the enlarged cave of Retzius contained blood and urine, which was drawn off to some extent by catheter, and was naturally thought to be the bladder. This extravasical collection of urine was also aspirated from the front. The entire absence of bruising was remarkable. However, Jacobson mentions that complete rupture of the urethra may co-exist with a mere contusion of the perineum. It is difficult to speak with certainty of the injuring agent in this case. I believe the sudden momentary impact of the pommel of the saddle was the cause of the injury. The urethra is generally torn in front of the triangular ligament, this firmly-fixed structure being a prime factor in the production of the laceration, but in this case the triangular ligament itself was much torn, and this must have required sudden great violence by a body small enough to act only in the pubic arch. If a small stump or branch had been the injuring cause, there must have been, I think, some perineal bruising. When the triangular ligament is torn it is nearly always accompanied by fracture of the pelvic bones or disjuncture, momentary or permanent, of the symphysis. This is only the second occasion on which I have found it imperative to practice retrograde catheterisms. Some years ago I showed a case in which I had performed it through a suprapubic incision, for impassable stricture, with excellent results. In the present case, bladder catheterism was absolutely necessary; but it was recommended by Delefosse, in 1889, as part of the treatment of ruptured urethra, and strongly advocated by Stewart in 1893, and also by Pearce Gould, as a means of performing a more accurate circular urethrorrhaphy. A very small bladder opening is recommended by Guyon, but in this case I preferred a good-sized opening, with the freest drainage. A retrograde catheter has been invented, but it is hardly a necessary unit in a surgeon's armamentarium. Though suture of the urethra was out of the question in this case, I might with much trouble have bridged the interval by the insertion of a urethral graft, as has been done by a New Zealand surgeon, who successfully intercalated over an inch of a live wether's urethra in the hiatus left by the removal of a very bad perineal stricture. This case may be fairly claimed as a very unusual one. Professor Axel Iversen, of Copenhagen, speaks of the exceedingly rare cases of rupture in the membranous part, being usually secondary to fractured pelvic bones, which complication did not exist in this case. The very satisfactory result of the case is due, in my opinion, in the first place, to Dr. Stewart's wisdom in desisting from attempts at catheterisation, and then tapping the bladder above the pubes, thus preventing pelvic cellulitis, and the packing with gauze of the spaces behind the pubes, which, of course, had the same end in view. Finally, the age of the patient must have been greatly in his favour.

Mr. STIRLING thought the case interesting and almost unique. He had only seen such complete rupture complicated with fracture of the pelvis, when operation was too risky. He read notes of a case of complete rupture of the bulbous portion of the urethra after a fall of six feet upon a sharp door edge.

Mr. C. RYAN congratulated Mr. Bird. Eighteen

years ago he had operated in a case of complete rupture from a gunshot wound. The thigh was completely shattered, and the ends of the urethra two inches apart. Sewing them together was then unknown, and he contented himself with passing an instrument into the bladder. The patient did well.

Dr. BUCHANAN added his congratulations. There were two points of special interest: the absence of local signs with so severe an injury, and the needlessness of the old fear of producing a stricture by free operation. The unconsciousness suggested the possibility of something more than a local blow, and remarkable success had followed where there had been a gap of three inches.

Mr. BIRD in reply, thought that the chips of bone had been pulled off by muscular violence. The result of treatment was extraordinary. It suggested that one might cut out a bad stricture. He attributed the success largely to the packing of all parts with gauze, thus preventing certain cellulitis and probable death.

DISCUSSION ON APPENDICITIS.

Dr. HENRY said in introducing a discussion on the subject of the treatment of appendicitis, as to whether this should be regarded from a medical or a surgical point of view, that he must at the on-set state that the distinctive features in the two branches of the profession seem to become more marked and more emphasized day by day, and that the older boundary lines stand out almost stronger than in days of yore. It seems strange, too, that although hardly any other affection makes such demands on the limited intelligence of physicians and surgeons, that such an amalgamation of scientific thought has not only not taken place, but that really divergent opinions should exist as to the appropriate treatment in this complaint. The physician will quote the number of cases that get well without operative interference, while probably the surgeon, in his anxiety to prove his case, is too hastily determined to test the effect of the knife. In order to reconcile one another, attempts have been made to formulate rules as guides as to when the knife may be used, and when drugs are to be administered. But even so, the vexed question seems to be no nearer solution, and the contest of opinion still goes on. It is because he had been recently impressed in a number of cases which he had had to deal with with the dangers of temporising by adopting general treatment, and the extreme risk to the lives of the patients by palliative procedures, followed by calamitous results, that the subject had engaged a good deal of his attention. The subject of appendicitis, even when confined to treatment, cannot be dealt with without acknowledging that its different forms—its symptoms—manifold and varied as they are, must bear some relationship to the advice which the attendant will be called upon to give. But without entering into subtle minutiae, there are sufficient general and broad points in the diagnosis which should enable us to unreservedly come to a decision on the particular point under discussion, without leaving the answer in the unsatisfactory condition of saying vaguely, "Well, in diffuse peritonitis we had better trust to drugs, but if there is an abscess, and poultices will do no good, will then make an incision and drain." This practically bears out the practice of the very conservative school. He presumed that those who follow this discussion are familiar with the writings on this subject of such authorities as Osler, Fitz, McBurney, Treves, Hawkins, Talamon, and Robson, who all unite in distinctly stating that there is no medicinal treatment for appendicitis. The practice of giving opium and salines is condemned, as obscuring the clinical

picture, while the salines are regarded as injurious and unnecessary, and cannot influence the course of the disease. And these authorities state, with a very convincing array of figures, that mortality from early operation is slight, and less regret is likely to be experienced. He had no desire to deal with the clinical picture as being familiar to all. A rapid pulse rate, with distension of abdomen and vomiting, sudden cessation of pain with a marked rise in pulse, and rigors, are all indications for immediate operation. Where there is acute appendicitis with generalised peritonitis, opinions differ as to the treatment, but where suppuration is suspected, surgical measures stand pre-eminent, while a good deal will depend on the clinical aspect of each case. He felt that the tendency to-day is to obtain surgical opinion. By so dividing the responsibility it cannot be said that the physician has allowed his patient to pass beyond the reach of treatment by dallying with drugs, and allowing what was at first a localised process to become diffuse and general.

G. A. SYME, M.B. Melbourne, then read the following notes upon the surgical aspect of the case:—On looking up his notes he found he had operated 40 times for appendicitis. (This was not the total number, as he had operated at hospital on cases which he had not had time to collate). The first operation was in March, 1891, the last on April 24th of this year. Of these 40 cases 10 died, and for the purpose of this discussion it may be most useful to briefly analyse these fatal cases.

Three were practically hopeless from general peritonitis when the operation was performed. In another, septicæmia was marked, though there was no evidence of general peritonitis. The operation was performed on the fourth day of the disease.

In a fifth case, pockets of pus were found amongst coils of small intestine; the operation was performed on the fourth day of the disease. He thought that the operation should have been more radical, and the general peritoneal cavity more thoroughly explored and washed out.

In a sixth case, operation was delayed by the friends for several days after it was advised; the pelvis contained serum, and here also probably operation should have been more radical.

In the seventh case the disease was far advanced when seen, and several intraperitoneal collections of pus were opened. She improved and lived for a fortnight after the operation. He wanted to open the abdomen a second time to explore for further collections, but the patient and her friends would not consent.

The eighth case rather puzzled him. She was a patient of his own, and he watched her closely from the very first onset. The symptoms were never severe; there was marked swelling and inflammation, and the operation was deliberately postponed to a later stage, when a well shut off abscess was opened. She gradually failed, and died several days after in a low septic condition. He could not get a *post-mortem* examination.

The ninth case was a late operation also, and the abscess well shut off. He did well and seemed all right for a week, then died quite suddenly with convulsions and coma, probably from embolism.

The tenth case was the only one where the death was possibly due to the operation. The appendix was not perforated, but there was an abscess very little shut off by adhesions. He removed the appendix, and just at the end of the operation the patient vomited, and the intestines were forced through the wound, and the peritoneal cavity of course opened. He died next day of acute septic peritonitis. Had he been content with

opening and draining the abscess he thinks he would have probably recovered.

As a result of his experience he could say he had never regretted operating, but he had committed errors of judgment as to the extent of operative interference, and perhaps as to the time of operation. It must be remembered that as a surgeon he saw the worst cases, and very seldom saw the mild catarrhal cases that undoubtedly occur and get well without operation. Much has been written about appendicitis, but perhaps opinions are not really so divided as is sometimes thought. His own experience and views as to treatment accord almost exactly with those of Richardson, *American Journal of Medical Science*; White, *Therap. Gazette*; and Mayo Robson, *British Medical Journal*, December 19th, 1896. However had the patient seemed, and although general peritonitis be present, operation should be performed. Mayo Robson's cases shew this decisively, though we cannot all hope to be quite so successful. The last case he (Mr. Syme) operated on had general suppurative peritonitis, and seemed almost hopeless, but after free flushing with hot saline solution, and most constant after-attention by his regular medical attendant, he is now practically well. Some cases (the acute infectious type of Poncet) will die whatever be done, and this must be recognised. Antistreptococcic serum is no use. Perhaps an antitoxin prepared from the *bacillus coli* might be beneficial. In the early stages (up to third day), if symptoms and onset are acute, high temp., quick pulse, great tenderness, and marked abdominal rigidity, and especially whenever rigors occur, operation should be performed; and at any stage if these symptoms occur, operation is indicated, as Mayo Robson says. In a paper written in May, 1891, he (Mr. Syme) maintained that it was possible, in the early stage, to distinguish between a case which would probably resolve under medical treatment and a case requiring operation; but he said, "Seeing, however, how little danger there is in operation, and how great the possible risks from the disease, which can never be precisely estimated in any individual case, I am strongly inclined, especially in recurrent attacks, to operate, unless the case be distinctly mild and quickly improve." In another paper on this subject, in March, 1894, he maintained the same views, and in May, 1895, repeated them, adding that, with further experience, he found himself in practice, leaning more towards early operation. The cases so treated have been the most satisfactory. Dr. Stawell would remember one such which he saw with him where there was no suppuration or peri-appendicular inflammation, but the appendix was greatly distended with sero-pus, and on the point of perforation on the second day. He never had a symptom or gave us the slightest anxiety after the operation.

The difficulty is in cases between the third and sixth day, as pointed out by White and Richardson. By this time pus has certainly formed (in cases which are said to resolve, the pus is discharged into the bowel or some other viscus), but there is considerable probability that it is not well shut off, and that in operating the peritoneum will be contaminated (as in the fatal case (18) already referred to.) In his paper (*Intercolonial Quarterly Journal*, May, 1895) he observed that "where there was marked localized swelling the constitutional symptoms were less pronounced, the process slower, and delay is permissible," and he had taken this as a guide in such cases. White follows the same indication. Much also depends on the circumstances of the case. If in a hospital with good light, good assistance &c., one would operate on a case which, seen in a private house at

night, with no preparation or nurse, it would be wiser to leave. It must be remembered that the abscess may often be very deeply placed, requiring much careful search. The question of removing the appendix also depends a good deal on the circumstances. Theoretically, as the *fons et origo mali*, it should be removed. Practically, it is frequently safer to leave it than to prolong the operation and risk contamination of the peritoneum when it is not easily found, or is densely adherent as is sometimes the case when there have been previous attacks. As a rule, in his experience, recurrent attacks tend to be more severe, though this is by no means invariable. Six of his operations were done in the intervals of quiescence for recurrent appendicitis, and recovered most satisfactorily. He had endeavoured to limit his remarks on the lines suggested by the opener of this discussion. He could say much more, but would simply remind them that no disease is more insidious or treacherous in its symptoms and signs than appendicitis, because in no other is there the same disproportions, in apparent severity, between the clinical and the pathological conditions.

Mr. RYAN, like all hospital surgeons, had had a deal of experience in these cases. With Mr. Syme he considered them more surgical than medical, and the presence of a surgeon essential to safety. He admitted that there must be a large number of catarrhal cases that get well without operation. Yet a certain percentage continued to die because operation was delayed until too late. He had seen four such cases last year. After Mayo Robson's experience no case should be regarded as hopeless. Of course, a competent surgeon was required. Again, the great liability to hernia was much lessened by early operation. His practice was either to operate very early or tolerably late. Between the 3rd and 5th days, there was much greater risk of contaminating the peritoneum. He removed the appendix if possible without trouble. If he found a fecal concretion he generally went no further. In one case, however, he had mistaken some phleboliths for concretions, and had to operate a second time.

Dr. SPRINGTHORPE could not agree with Dr. Henry that there was no medical treatment of appendicitis, and during his ten years in the hospital had had a fair and varied experience of cases so diagnosed. Some could be separated as typhilitis stercoralis, and were easily amenable to medicines; when, however, they were complicated, as at times with a sero-fibrinous exudation, the diagnosis was difficult, and still no operation was needed. He could recall a number of such cases that got well without operation. Again, as regards catarrhal appendicitis, he was glad to have Mr. Ryan admit that such cases were numerous. Possibly the physician saw an even greater number. Some of these evidently shewed an adhesive local peritonitis clearing up without suppuration, others a local peritonitis ending in abscess, others a diffuse peritonitis. It was impossible, and he would never think of relying upon local signs, or even general symptoms for certain differentiation. It was necessary to watch and act promptly as seemed best. If anywhere in disease the addition of the surgeon to the physician was essential, it was here and during this stage. His plan was at once to call a consultation, and share the responsibility, unless the patient was unmistakably improving. He quoted a case where the surgeons were divided in opinion, but the patient got well without operation. He also recommended cases, if a further attack took place, not to omit to have an operation after such attack. Amongst other difficulties in diagnosis he mentioned pyo-salpinx (even of the left side), typhoid with (?) previous trouble about the appendix, hepatic

abscess secondary to intestinal ulceration, and suppurating hydatid. Mr. Syme should be remembered as a local pioneer in the surgical importance of these serious abdominal troubles.

Mr. O'HARA, as surgeon to the Alfred Hospital, had met with many cases. In his address at the New Zealand Congress he had laid stress on the combination of surgeon and physician being imperatively called for. He had cases which had been sent in as typhoid. As regards time of operation no two cases were alike, and the question must be left to the surgeon in attendance—a few hours' delay might be fatal. So, too, with the removal of the appendix; all would depend on the case. As regards catarrhal cases, some at least contained seropus, or foreign bodies in the appendix; as he had found by operation. He was strongly opposed to using gauze as packing where there were loose intestines, and recommended drainage by glass or india-rubber tube. He was satisfied that early leeching, free douching, and salines relieved and even cured many cases of catarrhal appendicitis. As regards the site of the incision he preferred to incise so as to drain as low as possible, and did not favor McBurney's spot.

Mr. BIRD thought this the most live subject in surgery. Out of some 50 operations, he had been fortunate enough to have only two deaths, both recently. He thought this class of cases, if any, should be left to hospital surgeons; it would lessen the mortality 90 per cent. He agreed that a very large proportion of cases would get well without operation, but one never knew for certain which would not. The question was, when to operate. Apart from the intrinsically hopeless cases, the majority were amenable to treatment if seen at the right time. If seen from the first, he would operate in 36 hours if the patient were not better. If seen on the third or fourth day, he would then operate, unless the patient were improving. The typically difficult case was where there was an abscess deep in the pelvis—rectal examination was then of great value. The more he saw the more he was inclined to leave the appendix. The incision should be guided by the site of the mischief; sometimes a double incision was advantageous. With an abscess deep in the pelvis he cut down close to Poupart's ligament, used the finger as a guide, and took special pains, by packing, to prevent peritoneal infection. One fatal case he attributed to defective packing. He would never hesitate to operate, however bad. Many cases were called general peritonitis when there were simply a number of isolated pockets of pus. Cases of sudden gangrene could only be saved by immediate operation. He had recently found that there were cases of sero-fibrinous exudation, as Dr. Springthorpe had remarked. There were so many points of interest that he would suggest that some of them be taken at a subsequent meeting.

The PRESIDENT thought that as the hour was late the suggestion could be acted upon by adjourning the discussion.

Mr. KENT-HUGHES was afraid that adjourned discussions were not satisfactory.

Drs. O'SULLIVAN and MEYER thought that the scope might be widened by including the etiology and pathology.

Upon the motion of Dr. ANDREW, seconded by Dr. CUSCADEN, the discussion was adjourned till next month, and the meeting ended.

KANGAROO TENDONS, superior quality, prepared, both dry and in bottles, may be obtained from L. Bruck, Sydney.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

A GENERAL Meeting of the Branch was held on Friday, 29th April, 1898, at the Royal Society's Room. Present—Dr. Wm. Chisholm (President), in the chair; Drs. Clubbe, Crago, MacCormick, Jenkins, Worrall, Thring, Coutie, F. H. Quaife, Rennie, Gledden, Pickburn, Goode, J. A. Dick, Pope, W. G. Armstrong, Arthur, Jamieson, Hankins, Zlotkowski, Wilkinson, Littlejohn, Tidswell, Neill, Hinder, Macdonald Gill, F. W. Hall, Morgan Martin, Walker-Smith, Dowdell, A'Beckett McCarthy, Lillie, West, Flynn, Mills, Eichler, Trindall, Barrington, Gordon MacLeod, Dagmar Berne.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the election of Dr. Kingsbury, of Katoomba, as a member. Nominations for election: Dr. W. Cumming, of Woonoona; Dr. F. Magnus, of Sydney.

Dr. RENNIE proposed—"That Dr. Sydney Jones be the representative of the Branch on the Council of the Home Association." Carried.

Dr. WORRALL exhibited for Dr. J. B. Nash, a specimen of an anencephalous foetus.

Dr. THRING said from a practical point of view the great difficulty in such cases was the trouble arising at delivery, and the difficulty of diagnosing the presentation.

Dr. GLEDDEN said that he had had two cases similar to that exhibited, and had sent one specimen to the University Museum. The difficulty of diagnosis of the presentation was the trouble which had to be met. He (Dr. Gledden) came to the conclusion that the first case was one of breech presentation. After it was born, on inverting the foetus, he was surprised to see a long red streak along the back, there being a complete spina bifida. In looking up the literature of such cases there was not much of interest from a practical point of view.

Dr. ARTHUR said the exhibit was similar to a case he had seen while assisting Dr. Nash at Wallsend. In this case the child breathed. He would like to ask Dr. Gledden if the cases he had reported had breathed.

Dr. GLEDDEN said that one case just gave a gasp, but the other case was still-born.

Dr. WEST reported that he had had a similar case, and the specimen had been sent to the Museum. There was some difficulty as to the presentation. The child lived for a short time.

Dr. WILKINSON read a paper on the scientific basis of the prevention and treatment of consumption, with special reference to the use of the old and the new tuberculin, which will appear in a future issue.

Dr. HANKINS proposed the adjournment of the discussion upon the paper until the next meeting of the Branch.

The PRESIDENT announced that a specialist, who had obtained certain Lodge work by means of a circular letter, had, upon being approached by the Council, withdrawn the letter, and decided to discontinue the work so obtained.

"Some Peculiar Features in a Case of Hypnotism," by Dr. George de Clive-Lowe, published in *A. M. Gazette*, December, 1897, is quoted from by *New York Medical Journal*, February 12th, 1898.

The *Lancet* of April 2nd, 1898, contains an appreciative notice of the article contributed by Dr. G. Lane Mullins to the *A. M. Gazette* in January last, entitled, "Tuberculosis and the Public Health."

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting held at the University, on Thursday, March 31, 1898. Present: The President (Dr. Giles), Drs. Lendon, Swift, A. E. Wigg, H. H. Wigg, Michie, Evans, W. A. Verco, Harrold, Cavanagh-Mainwaring, Russell, Morgan, Gunson, Bickle, J. A. G. Hamilton, Marten, A. A. Hamilton, T. K. Hamilton, Borthwick, C. W. Hamilton, S. J. Magarey, Fischer, Perks, Lermite, Prof. Watson, and Hon. Secretary (Dr. W. T. Hayward). Dr. Pinnock, of Ballarat, and Dr. Lee, of New South Wales, were present as visitors.

CLINICAL EXHIBITS.—Professor WATSON shewed a case of "Necrosis of the Radius" that presented several points of interest.

Mr. Barbour forwarded some interesting skiagrams for exhibition.

Dr. J. C. VERCO read his paper on "Foreign Bodies in the Air Passages." (See p. 209.)

Dr. MARTEN mentioned two cases of trouble with the air-passages after extraction of teeth under an anæsthetic, which had come under his notice. The first, a man aged 40, who, after having all his teeth out, suffered from a most persistent cough, with offensive expectoration, the smell of which he likened to decayed teeth. The patient was seen by Dr. Way in consultation, but the supposed foreign body could never be localised, and after about two months the cough and expectoration ceased, but no tooth or fragment was ever seen. The second case was that of a lady, aged 80, who after dental extraction developed a severe cough, which was followed by a right-sided purulent pleurisy, and which is still discharging, and what makes a foreign body look probable, is that occasionally the patient has severe attacks of hæmoptysis, whilst previously to the dental operation she always enjoyed most excellent health. Dr. Marten also mentioned three other cases, in one of which a melon seed, another a pea, and a third a piece of walnut shell, were inspired into the air passages. The two former were removed after a tracheotomy, but the walnut shell was lodged in the ventricle of the larynx, and was found only at post-mortem examination.

Dr. FISCHER alluded to Kierstein's autoscopic method of examining the throat as a possibly valuable means of diagnosis.

Dr. T. K. HAMILTON said he had had only two cases of foreign bodies in the upper air passages, both of which are recorded in the transactions of this Branch. The method of examining the throat known as "autoscopy," introduced by Kierstein, of Berlin, promises to be a most valuable aid in discovering the presence of foreign bodies in the trachea as far down even as within the entrance of the bronchi, and it also promises to facilitate their removal *per vias naturales*, so that probably tracheotomy will not have to be resorted to for this purpose as frequently in the future as in the past. Autoscopy, it is hoped, will also make intubation of the larynx an easier performance than it is at present.

Dr. HARROLD and the PRESIDENT also discussed the subject, and related cases that had occurred in their practice.

Dr. A. E. WIGG briefly replied.

Dr. J. A. G. HAMILTON read his paper on a "Case of Hydatids." (See page 212.)

Dr. HUMPHREY MARTEN said he thought Dr. Hamilton's case pointed to the fact that the great majority of abdominal hydatids, and more especially

those in the pelvis, were secondary to a ruptured hepatic hydatid, either a spontaneous rupture of the cyst, or due to unavoidable leakage at an operation, and mentioned two cases which had recently come under his notice. The first case was one which he had read before the Society last year, in which he had drained a pelvic hydatid in a man through the perineum, and upon whom he had previously twice operated for cysts in the liver. The second case was that of a young lady upon whom the late Dr. O'Connell had asked him to do an ovariectomy, and which turned out to be a large single pelvic hydatid, which was successfully treated by marsupialization. She consulted him again a few days ago, and about three years after her former operation, and then had a large liver hydatid and several pelvic ones, and then told him that before her former operation she had had a swelling over the situation of her present liver cyst, but which had spontaneously disappeared. The cysts were again removed, but unfortunately the patient succumbed to acute peritonitis, probably owing to the inability to perform Lindemann's operation on the numerous pelvic cysts, most of which had to be treated by Bond's method.

Professor WATSON, while agreeing that a majority of pelvic hydatids arise from the abdominal organs, was convinced that a certain number of cases have an independent origin, and quoted some cases in support of his contention. He condemned the Hamilton-Russell operation in the treatment of hepatic hydatids, but considered it applicable to those of the peritoneum.

Dr. J. C. VEROO quoted a case which supported Dr. Marten's contention. He also related a case in which he had been forced to adopt the Hamilton-Russell procedure, with an unfavourable result.

Dr. A. E. WIGG mentioned a case where he had recently opened and removed a cyst in the liver, sewn up the cavity, and stitched it to the abdominal wall. An uninterrupted recovery resulted.

Dr. BICKLE made some remarks on the subject.

Dr. PINNOCK, on being invited by the President to speak, said that he agreed with the views expressed by Professor Watson, and supported his contention by quoting several interesting cases.

The PRESIDENT strongly condemned the Hamilton-Russell operation, and related a disastrous result in which he had adopted this method in a case of peritoneal hydatid.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 135th General Meeting was held on April 5th, 1898, in the Society's rooms.

Present: Dr. Wheeler (President), Drs. Hopkins, Gibson, Carvoso, Francis, Nall, Dennis, Halford, Hardie, Love, Bancroft, and Turner.

Dr. FRANCIS showed a young woman suffering from paresis with anæsthesia of the soft palate of six months' duration. There was no other lesion, and no history of sore throat. There were no symptoms of hysteria.

Dr. GIBSON showed a case, and read notes of Double Lamellar Cataract, in which each lens showed a central nucleus and nucleolus. (See page 205.)

Also a case of operation for entropion in a girl of 11 years. The case was one of old standing granular lids and pannus. A modification of Snellen's operation was employed for both upper lids. Seven or eight intorted lashes in the lower lids had been got rid of by electrolysis, and one or two eccentric lashes in each upper lid had been similarly treated.

He found it sufficient if the galvanometer registered one milliampère while the needle connected with the negative pole was in the follicle, and the positive electrode was held by the patient's hand. He allowed the current to pass for one minute.

Dr. HARDIE showed a case of undeveloped nostril with defect of the lachrymal groove on one side, complicated by the presence of a small cyst at the inner angle of the orbit. The cyst he proposed to remove.

Dr. TURNER showed a child with a cyst in the median line of the neck, over the hyoid bone, due probably to a partially persistent thyro-glossal duct.

Dr. GIBSON read a case of Glaucoma induced by Dengue. (To appear in a future issue.)

The 136th General Meeting was held on M 3rd 1898, in the Society's rooms.

Present: Dr. Wheeler (President), Drs. Hill, Orr, Gibson, Halford, Hardie, Byrne, Carvoso, Robertson, Francis, and Turner.

Dr. CARVOSO read a paper on a case of Chronic Serous Pleuritic Effusion. (To appear in a future issue.)

Dr. TURNER remarked that these cases were very rare, and difficult of explanation. Apparently the patient had made a much better and less risky recovery than Dr. West's case, in which the pleural cavity was opened.

Dr. GIBSON questioned whether the effusion was inflammatory at all. Should the case not rather be spoken of as Hydrothorax, or Hydrocele of the Pleura?

Dr. HARDIE had never seen any analogous case. He had, however, frequently seen chronic serous effusions, even when extensive, recover under the use of iodine ointment, without aspiration.

Dr. BYRNE made allusion to two cases of pleurisy secondary to malignant disease of the breast and vulva respectively. Both proved rapidly fatal. In one there was difficulty in diagnosis, the physical signs resembling those of consolidation of the lung.

Dr. ROBERTSON had seen the case, and could vouch for the enormous quantities of fluid removed. The woman was quite healthy lately, and the affected side expanding well. There was slight dulness at the base, probably due to pleural thickening.

Dr. HALFORD mentioned a case of extreme effusion in which rupture had occurred, the patient coughing up large quantities of serous albuminous fluid, not hydatid. This was an unusual termination of a non-purulent effusion.

Dr. CARVOSO regarded his case as one of quiet pleurisy without fibrinous, but merely serous effusion, due to inflammation of a low type. He had heard of cases similar to that mentioned by Dr. Halford, though they were rare.

Dr. ROBERTSON read notes of an Obscure Abdominal Case (which will appear in a future issue), and showed the patient.

Dr. BYRNE said it was difficult to express a decided opinion on a few minutes' examination in a crowded room. Several points needed clearing up. Firstly, the appearance of the man suggested tubercle, and this should be excluded by careful examination. This being granted, he believed there was pus somewhere, and the question was—Where? Perhaps the patient had a liver abscess, or more probably suppuration in the lesser peritoneal cavity. The pain was suggestive of the latter. The question of treatment was difficult, but he was inclined to explore from the back with an aspiration needle. Failing to find pus, he would make an abdominal incision and explore the liver with the needle. This proving negative, he would introduce the hand behind the stomach to explore this region.

Dr. HARDIE agreed that there was probably pus there, but probably secondary to malignant disease. He would explore through an abdominal incision in the first place.

Dr. HALFORD thought the definite history of injury at the commencement, and the absence of marked anaemia, or extreme cachexia, were against malignant disease, and that the symptoms pointed rather to chronic suppuration.

NEWCASTLE MEDICAL SOCIETY ANNUAL MEETING.

THE Annual Meeting of the above Society was held in the Newcastle Hospital on 31st March. Present—Dr. Harwood, in the chair; Drs. Hester, Nickson, Ayres, Treloar, Bean, Dunlop, Horsfall, and Beeston.

The Secretary's and Treasurer's reports were read and adopted.

The election of officers resulted as follows:—President, Dr. Beeston; Vice-President, Dr. Eames; Secretary, Dr. Nickson; Treasurer, Dr. Hester.

The retiring President (Dr. Harwood) then read an address, in which he reviewed the advances in medical and surgical science during the past 60 years, contrasting the treatment of disease at the beginning of that period with that pursued at the present time.

A vote of thanks to Dr. Harwood for his paper closed the business.

THE WESTERN SUBURBS MEDICAL ASSOCIATION.

THE Annual Meeting was held at the Petersham Town Hall on Wednesday, April 20, 1898.

Present—Dr. McAllister (President), in the chair; Drs. Maguire, Mollroy, Mills, Robertson, Fordyce, Harrison, Blaxland, MacSwinney, Lovegrove, Chenhall, Hinder, Wood, Walker-Smith, A'Beckett McCarthy, Ludlow, Trindall, Coutie; and Messrs. Asprey and Pier.

The minutes of the previous meeting were read and confirmed.

The Treasurer's report and balance-sheet was read and adopted. The statement showed a balance in hand of £25 13s. 4d.

The PRESIDENT announced that the following were elected office-bearers for the years 1898-9:—President, Dr. Maguire; Vice-Presidents, Drs. Coutie and Mollroy; Treasurer, Dr. Blackwood; Secretary, Dr. Abbott. Members of Council, Drs. McAllister, Collingwood, Wood, and Piercy. Auditors, Drs. A'Beckett McCarthy and Fordyce.

The PRESIDENT then read his address. The chief events of the year were touched upon, and mention made of the various meetings held by the Association. Special stress was laid on two matters specially affecting the profession:—

- I. The extension to the Western Suburbs of the water and sewerage system.
- II. The compulsory notification of certain diseases. It was pointed out that little or no good could possibly result from the present system owing to the ignorance and incompetence of the local officers appointed to carry out the provisions of the Act.

At the conclusion of his address Dr. McAllister gracefully introduced his successor, Dr. Maguire.

The opportunity was taken to present Dr. MacSwinney (who is leaving the district) with three handsome bronze figures.

At the conclusion of the business a smoke concert was held, in which Drs. Maguire, Blaxland, Mollroy, and Robertson, and Messrs. Asprey and Pier took part.

ABSTRACTS.

EXTRACTS FROM FOREIGN LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, SYDNEY.

THE report of the Commission of the National Academy upon the *serum-therapy* of Dr. Carrasquilla appears in the *Revista Médica de Bogota* of December last. It states that treatment of twelve leprosy patients for nine months showed no modification whatever of the disease nor of the bacillus of Hansen, and that it had produced no effect different from that which would have been caused by injections of simple serum. In the *Boletín del Consejo Superior de Salubridad* of February, Dr. Bevueltos, a public vaccinator of Mexico, states that in twenty-eight patients vaccinated whilst they were suffering from *Whooping Cough*, the frequency and violence of the attacks notably diminished from the moment of vaccination, and that when the pustules reached maturity the patients were almost or entirely cured. Lymph from these cases was not taken for propagation.

In *Janus* for July-August, 1897, Max Höfler writes on *Early German Medicine*. He observes that long after Hippocrates had freed Greek medicine from the control of demonology German medicine retained its superstitions, and that on the introduction of Christianity the devil was made to usurp the functions of the heathen demons Alp, Adel, Berchta, Hex, Kobold, Schelm, &c., which popular imagination had invested with grotesque shapes. Among the old Germans death from sickness was not considered honorable; failing the evidence of some wound which would qualify him for admission to Walhalla, the patient would inflict one on himself. The remedies in vogue were almost all for wounds. Illness was considered to be either a fight against a demon or a punishment by the gods, who required propitiation by some sacrifice. He shows how the practice of medicine came to be vested chiefly in the women on whom the care of the sick devolved, and how knowledge thus transmitted caused them to be credited with occult powers and witchcraft. Even the midwife made magic signs in the hollow of her hand and invoked supernatural assistance.

Dr. Eijkman, of Batavia, records the observations made by himself and by Dr. Vorderman on the cause of *Beri-Beri* in Java among 280,000 persons. The disease is traced to rice diet, independent of locality, extraneous influences, or of the origin or the condition of the rice itself. It is found to be caused by decorticated or white rice. Among prisoners fed on decorticated rice the incidence of *Beri-Beri* was 1 in 39, among those fed on rice partially decorticated (retaining at least 75 per cent. of the pericarp) it was 1 in 10,000. At Magelang it raged among the native soldiers who were fed on decorticated rice, but among the prisoners, who were fed on that partially decorticated, the disease did not exist. Twenty-four condemned persons from the prisons were fed experimentally on decorticated rice. After a time seven of them contracted *Beri-Beri*, of whom six recovered after returning to prison fare. At Tolong Agong, where prisoners were fed on decorticated rice, the proportion of *Beri-Beri* patients was 5.8 per cent. On July 1, 1895, they were placed on diet of rice partially decorticated, and the morbidity sank to zero.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH MAY, 1898.

EDITORIALS.

FEDERATION.

THE Referendum on the Commonwealth Bill of 1898 will have been taken before the next publication of the *A. M. Gazette*. Whatever be the opinions of medical men as regards this Bill, we trust that every member of our profession who has the privilege of voting upon this great question will take more than ordinary care in seeing that he records his vote. Every elector should consider it to be his duty to always exercise his franchise, and especially should he consider it to be so upon this epoch-marking occasion.

THE "MEDICAL PRESS" AND NEWS- PAPER ETHICS.

WE exceedingly regret that it has become our duty to expose a flagrant case of plagiarism on the part of a contemporary. Our readers will remember that in our issue of January last we published a paper entitled "Tuberculosis and the Public Health," by Dr. G. L. Mullins, of Sydney. This paper had been read earlier in the month at the meeting of the Australasian Association for the Advancement of Science. One may judge of our astonishment

a few weeks ago, when we read in the *Medical Press and Circular* (London) of March 30, 1898, an editorial on "The Identity of Human and Bovine Tuberculosis," the greater part of which was almost word for word a reprint of a section of Dr. Mullins's paper. In order that the readers of the *A. M. G.* may have an opportunity of comparing notes, we print side by side the first part of the editorial and the corresponding paragraphs from Dr. Mullins's article. In doing so, we may remark that in the *Medical Press* no mention is made of Dr. Mullins, the Australasian Association, or the *A. M. Gazette*.

(EDITORIAL, *Medical Press*, March 30, 1898.)

(MULLINS, *A. M. G.*, January, 1898.)

"THE IDENTITY OF HUMAN AND BOVINE TUBERCULOSIS.

"THE IDENTITY OF HUMAN AND BOVINE TUBERCULOSIS.

"The progress of science has established without doubt the fact that human and bovine tuberculosis are identical. The record of the instances of infection from human beings to lower animals, from one animal to another, and from the lower animals to man, is now a specially lengthy one, and further evidence upon the subject goes on accumulating.

"There are some who doubt the identity of human and bovine tuberculosis. But there are on record numerous instances of infection from human beings to lower animals, from one animal to another, and from the lower animals to man. The following are some cases in illustration of these modes of conveyance. . . ."

"Moreover, that there is an intimate connection between tuberculous diseases in man and animals is plainly demonstrated by the fact that where cattle are few or absent, the prevalence of tuberculosis in man falls to a low ebb. Inquiry into this point shows that in the northernmost countries of the world, where reindeer take the place of cattle in the farms, tuberculous disease is very infrequent in comparison with those countries where cattle abound. Thus there appears to be a good deal of truth in the statement of Dr. Charles Creighton that owing to the peculiar errors of nutrition in the domesticated bovine species all over the world, cattle are the real fountain and source of human tubercle.

"That there is an intimate connection between tubercular diseases in man and animals is plainly shown by the fact that where cattle are few or absent consumption exists in man to a much smaller extent. In the northernmost countries of the world, where reindeer take the place of cattle in the farms, tuberculosis is far less prevalent in man than in those countries where cattle abound. Norway and Sweden, Finland and Lapland, are instances of this. On the other hand, in Italy and in Ireland, where the cattle are kept in the houses, tuberculosis is frequent in both man and the lower animals."

"Dr. Charles Creighton goes so far as to say: 'I cannot escape from the conviction that the peculiar errors of nutrition in the domesticated bovine species all over the world are the real fountain and source of human tubercle.'"

"As showing how tubercle can be transmitted from man to cattle, mention may be made of the following remarkable incident, related by a French veterinary surgeon. In an admirably-kept stable, containing twenty-four cows and one bull, all in good condition, tuberculosis had never been known; but in 1886 two of the cows began to cough. They were handed over to the butcher for slaughter, but one was so markedly tuberculous that it had to be condemned. In due course, all the cows in the same row were attacked one after the other. They were sent to the slaughter house as soon as they became ill, but in 1892 the tuberculin test showed that of the twenty animals composing the herd seven were tuberculous. All these seven animals belonged to the same row, the twelve in the other row being quite sound; and the autopsies on the seven animals confirmed the diagnosis. An inquiry, instituted for the purpose of discovering the cause of the contamination of the stable, revealed the fact that in 1883, three years before the recognition of the first cases, the farmer had engaged as cowherd a man who suffered from pulmonary tuberculosis. This man, who used to cough and expectorate constantly, slept in the stable, immediately over the two cows which were the first to fall ill. This cowherd resided here until 1891, having been treated for phthisis in the meantime. The conclusion, then, seems inevitable that the cows were infected from the sputa of this tuberculous man."

"An interesting fact which may be here mentioned is that in Colorado (U.S.A.) there is a remarkable freedom from tuberculous disease in human beings, and the reports of the State veterinarians show that only two per cent. of the cattle react to tuberculin. The disease, indeed, is so rare among Colorado cows as almost to

"Cosette, veterinary surgeon at Noyon, France, relates that in a farm at Beauce, an admirably-kept stable contained twenty-four cows and one bull, all in good condition. Tuberculosis had never before been known in the stable, but in 1886 two of the cows began to cough. They were handed over to the butcher for slaughter, but one was so markedly tuberculous that it had to be condemned. In due course, all the cows in the same row were attacked one after the other. They were sent to the slaughter house as soon as they became ill, but in 1892 the tuberculin test showed that of the twenty animals composing the herd seven were tuberculous. All these seven animals belonged to the same row, the twelve in the other row being quite sound; and the autopsies on the seven animals confirmed the diagnosis. An inquiry, instituted for the purpose of discovering the cause of the contamination of the stable, revealed the fact that in 1883, three years before the recognition of the first cases, the farmer had engaged as cowherd a man who suffered from pulmonary tuberculosis. This man, who used to cough and expectorate constantly, used to sleep in the stable immediately over the two cows which were the first to fall ill. This cowherd resided here until 1891, having been treated for consumption in the meantime. There can be no doubt that these two cows in question were contaminated by the sputum of this man."

"Colorado, U.S.A., is remarkably free from tubercular diseases in human beings, and the reports of the State veterinarian show that only two per cent. of the cattle react to tuberculin. The disease is so rare among Colorado cows as to be almost a curiosity. When it does occur, it is usually either in animals which have had the worst

be a curiosity. When it does occur, it is usually either in animals which have had the worst of care as regards overcrowding, or in imported animals. Investigation has repeatedly shown native animals are immune."

We cannot but feel complimented by the fact that an article by an Australian writer has attracted so much attention on the other side of the world, but the author of the paper has cause to feel aggrieved that he is denied the credit due to him for his work.

INSANITARY DWELLINGS IN SYDNEY.

THE authorities of the municipality of Sydney are to be congratulated on having undertaken a tour of inspection of such parts of the city of Sydney as contain "slum" tenements. It may come as disquieting news to some people that such undesirable quarters exist in our midst. It must, however, be gratifying to all well-wishers of the public weal to learn that numerous dwellings coming under the above category have been condemned as unfit for human habitation. The admirable work of erecting healthy abodes for the humble wage-earner, as well as for the very poor, has in many instances been commenced by private philanthropy and furthered by civic bodies invested with the necessary legal powers in most European cities. Further, it has been proved, that not only has outlay of the kind been shown to be true economy, but that actually a fair rate of interest may be expected to be returned on the capital invested. The demolition of the Sydney rookeries will no doubt cause individual inconvenience, if not actual hardship; but, inasmuch as the herding together of persons in such areas tends to furnish recruits for the hospital or the prison, it is the first duty of the State to attack the evil at its source. Nevertheless, it is earnestly to be hoped that the sequel to the step just taken by our city authorities will be action in the direction indicated.

SICK-ROOM APPLIANCES IN N.S.W.

A MOVEMENT has been on foot in Sydney for some time past to provide the sick poor, at their homes, with the necessary surgical and

medical appliances. A meeting of those interested in the scheme was lately held at the Town Hall, when the following motion was proposed and carried:—"That this meeting heartily approves of the formation of a Society, having for its objects the provision of medical and surgical appliances for the benefit of the sick poor requiring the use of the same, and cordially recommends the work of the Society to the generous support of the public."

The want of such a society has long been felt in Sydney, and the relief which it will afford will be appreciated at once by the medical profession as well as by the sick poor. The object is commendable also in that it proposes to assist a section of the population which has no desire to swell the ranks of those who flock to the hospitals, which institutions are already overcrowded.

MILK ADULTERATION IN N.S.W.

PRIOR to the passing of the N.S.W. Health Act, unscrupulous milk-vendors had been in the habit of making ingenious subterfuges in order to escape legal penalties for selling an article which had been more or less adulterated; and, until quite recently, efforts of the kind were far more successful than they deserved to be. The real culprit would lay the blame on the driver of the cart if water or chalk were discovered in the milk of which he was trying to dispose, or some other person equally apt to disappear when the case came on for hearing. Small wonder, therefore, that the fraud was greatly persisted in, to the detriment of the public health. Under the present Act, however, the master is held responsible for the actions of his servants, which simplifies matters at once. Henceforth, the proprietor, it is to be anticipated, will see that the article he supplies is up to the standard demanded, and will also have an eye to his employees, and keep their actions in conformity with the requirements of this clause of the Bill.

VIBRONA.—This excellent tonic wine, which was introduced to the profession a few months ago by Messrs. Fletcher, Fletcher, & Co., of London and 18 O'Connell-street, Sydney, has already gained for itself a good reputation as a general tonic and invigorant, especially useful after influenza, and during convalescence from a surgical operation. It is a combination of Liquor Cinchonæ Hydrobrom. with a high-class wine, giving an elegant and palatable preparation in which the bitterness of the Cinchona is not at all objectionable, and the presence of the Hydrobromic Acid reduces to a minimum the risk of "Cinchonism." From personal use and experience of its invigorating qualities, we can strongly recommend it in all cases where a tonic wine is indicated.

LETTERS TO THE EDITOR.

BIFOCAL LENSES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I hope Dr. W. Kent Hughes will excuse the delay in replying to his letter, which appeared in your issue of January 20th. Absence from home is my excuse for not having replied sooner. I am very sorry if I have misinterpreted the meaning which Dr. Hughes intended to convey respecting spherico-cylindrical bifocal combinations, but I think he will admit that in the light of his further explanation the original wording of his article, "There are some combinations which are impossible, &c.," was scarcely explicit enough, and that my interpretation of his meaning was a fairly reasonable one to put upon the words as quoted. If Dr. Hughes will refer to Noyes' "Diseases of the Eye" (1882), p. 61, he will see mention of lenses of double focus ground upon one piece of glass; and again in an old catalogue published by the Société des Lunetiers (Paris) he will find figured on p. 3 a *fac-simile* of the woodcut which was printed in his article in your issue of last September. This catalogue does not bear any date, but my optician tells me he has had it in his possession for upwards of fifteen years.

I am, Sir, Yours, &c.,

T. K. HAMILTON.

Victoria Square, Adelaide, May 7, 1898.

FOREIGN BODIES IN THE AIR PASSAGES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In your issue of the 20th inst., Dr. A. E. Wigg gives a very instructive account under the above heading, of a case where, during the extraction of teeth under ether, a tooth escaped from the forceps and lodged in the air passages, with fatal consequences. Dr. Wigg says, "It is difficult to see how the possibility of this unfortunate accident, happening during dental extraction is to be avoided." I wish, Sir, to point out how such an accident can be rendered impossible, and how the greater safety of the patient during the administration of the anæsthetic can be secured, while the facilities for operating are much superior to the present methods. Let the patient be placed on his back on a table, the head of which is close to a window affording a good light; so soon as anæsthesia is complete let him be drawn towards the head of the table till his head and neck come over it, allow the head to hang down till the face is vertical, insert a gag and open the mouth, and the dentist can now proceed to remove the teeth. An excellent light will fall into the mouth from the window, if the dentist stands partly to one side of the patient. Neither a missed tooth nor blood (which is even more likely to happen in the ordinary position employed by dentists) can fall into the air passages. There ought to be ready some swabs or holders to keep the mouth dry as required. The position which I have described is the one ordinarily employed in the removal of post-nasal adenoids. The completely recumbent position is much safer during general anæsthesia than the semi-recumbent one at present in use. As a further comment on Dr. Wigg's paper, I would venture to suggest that during the early days after the accident, when "attempts to speak or move brought on violent attacks of coughing," the

tooth was moving up and down in the trachea and impinging on the larynx, and had not then become impacted in a small bronchus.

I am, Sir, yours obediently,

A. J. BRADY,
Hon. Sur., Ear, Nose, and Throat Dept.,
Sydney Hospital.

3 Lyons Terrace,
23rd April, 1898.

MEDICO-LEGAL.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Under the heading "Medico-Legal," for 21st March, 1898, you have 17 lines describing a case of the utmost importance to the medical profession. It is apparently written by someone who is in complete ignorance of the case, and his wording conveys such a distorted view that it would fail to give anyone a correct impression.

Those from whom the skin was removed did not "consent," they *came and volunteered*—and further, they openly stated that they were "giving their skin to Jesus." The next point is that no reference whatever is made to the method of skin-grafting used. Was the whole thickness of the skin taken? Or what? Even the lay press stated that the method used was that of "Thiersch," in which thin shavings of skin are removed with a razor, and which include the epidermis and the tips of the papillæ of the true skin. Anyone who has seen areas from which this has been removed knows that in 12 to 14 months' time there is hardly any sign left. Further, the authorities state that in two years time fresh grafts may be removed from the same area.

If plaintiff ever were under the impression that "only a small piece of skin would be taken" she never received that impression from me. The same as to "suffering little inconvenience."

Further on it states, "Instead, however, a considerable quantity, 52 square inches, was taken from her arm and leg while under chloroform, and she had to remain in the hospital for 11 days." As a matter of fact, after the patient had come to the hospital as a volunteer, she was asked if she would allow some skin to be taken from her leg in case enough could not be got from her arm. Her reply was that she would leave the matter entirely in my hands. The area taken from the arm was never measured by me. It was measured by two medical men—one stating that it was 4 in. x 5 in., the other stating it was 3½ in. x 4 in. The area from the leg, they stated, measured 4 in. x 8 in. Further, it is stated, "It transpired that the patient died." When? And cause of death not given. The patient was the one who was *burnt*, and not the one who gave the skin, and she died some months after the grafting. *Post-mortem* examination shewed that she died of phthisis (pulmonary.)

A verdict was naturally given for the defendant, considering that the numerous clauses of the statement of claim broke down—the majority after evidence for the plaintiff had been given and before any evidence for the defendant had been called.

Another point not mentioned is the fact that the action was threatened in July. I then requested the plaintiff to bring the action at once, as I courted the fullest enquiry. The action was not brought till February of the following year, about 10 months after the operation. It was well known that I was leaving for England in February, and I was compelled to force the

action on in February in order to get away. Plaintiff, no doubt, hoped I would compromise rather than stay and contest the case.

Yours faithfully,

A. CHALLINOR PURCHAS.

"S. S. India,"

28th March, 1898.

MALARIAL FEVER IN NEW ZEALAND.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In the June number of the *A. M. Gazette* of last year is a reprint of a paper read by me before the New Zealand Branch of the British Medical Association to the effect that there is no reliable evidence of the existence of malarial fever in New Zealand. The following notes of a case by Dr. Collins, of Wellington, will shew that, although rare, cases of genuine malarial fever have been observed.

"H. D., aged 41, consulted me during 1897. He contracted ague 20 years ago while working in a swamp at Woodend, on the Amberley line, 12 miles from Christchurch. He has never been in any ague district, and is a native of New Zealand. He has had frequent attacks during the last 20 years."

JAS. HUDSON, M.B. (LOND.)

REVIEWS.

HUMAN FADS, FOIBLES, FALLACIES, FALLIBILITIES, &c. By Samuel T. Knaggs. Sydney: Angus and Robertson, 1898.

In this little volume of 109 pages, Dr. Knaggs puts before us some very readable articles treating mainly of spiritualism and hypnotism, together with some papers on allied subjects. The first chapter dealing with the psychological aspect of the spiritualism of the present day is divided into five parts; these describe the origin, objects and phenomena of spiritualism. The paper on human fallibility and its relations to accidents by railway and on sea is so well known that it needs no description. "Some Minor Forms of Hypnotic Suggestion," "The Rationale of Miraculous Cures in Modern Days," "The Elements of Success in a Medical Career," "Dr. Koch's Reputed Cure for Consumption," and "Poisons and Poisoners," are the titles of the other papers in the volume. Some of these are republished from the columns of the *A. M. Gazette*, while the last has not before appeared in print. The work affords much food for thought to all scientific men.

THE MEDICAL ANNUAL AND PRACTITIONER'S INDEX: A WORK OF REFERENCE FOR MEDICAL PRACTITIONERS. 1898. Bristol: John Wright & Co. Price, 7s. 6d. net.

The Medical Annual is now in its sixteenth year. The present issue is fully equal to its predecessors, and that means that it is one of the most perfect of its kind. Three Australian writers, Drs. David Hardie, (Brisbane); G. Lane Mullins (Sydney); and Charles E. Todd (Adelaide), contribute articles on Australian diseases. An excellent atlas of the bacteria pathogenic to man, by Mr. S. G. Shattock, is one of the features of the volume. Another is a report of the legal decisions which affect the medical profession directly, or have reference to the public health. Part I (Therapeutics) consists of a dictionary of new remedies, and a review of therapeutic progress for 1897, by Dr. W. Murrell. It is exceedingly valuable. Part II. (New Treatment) contains descriptions of all the latest and most perfect

methods in medicine and surgery. A review of the progress of sanitary science during the past year is written by Dr. Joseph Priestly.

The Medical Annual is a necessity in every practitioner's library.

THE BOOK OF DIET. By Philip E. Muskett, late Surgeon to the Sydney Hospital; formerly Surgeon-Superintendent to the N.S.W. Government (S. I. Service); Medical Superintendent, Quarantine Station, Sydney; and Senior Resident Medical Officer, Sydney Hospital. Melbourne, Sydney, Brisbane, Adelaide, London: George Robertson and Co.

Dr. Muskett is to be congratulated on having written a very sensible, practical book. Having pointed out that in Australia we consume excessive quantities of animal food, he goes on to show that our diet is wanting in vegetable elements. "Meat eating in Australia is almost a religion;" he says, "at any rate the Australian is certainly a meat worshipper. An excessive amount of animal food . . . in our semi-tropical climate is simply an invitation to disease." We have in our midst excellent vegetables, yet we use chiefly the potato and the cabbage. Fruits of all kinds grow luxuriously throughout the continent, but we allow them to rot upon the trees, or we export them to other countries where they are appreciated. Then, too, we have the wine-growing industry, for which our soil and climate are eminently suitable, but we drink imported spirits, wines, and beers. "We shall not go far wrong in Australia," says Dr. Muskett, "if we stick to our own natural wines." The most temperate peoples are those of wine-drinking countries.

Our food habits need changing. We eat meat three or four times a day; we give it to our servants; we feed our children with it as soon as a few teeth show themselves. Vegetables, fruits, and light wines are ignored. We do not even understand the science and art of cooking. On these matters Dr. Muskett writes strongly and to the point.

The Book of Diet is divided into two parts. The first part consists of four chapters on *Vegetables*, *Fruits*, *Salads*, and *Alcohol* respectively. The second part contains recipes, some new, some old, but all excellent.

It is really time that medical men took up this question of food in Australia. Let us by all means adopt Dr. Muskett's valuable suggestions, and induce our patients to eat less meat and more vegetables and fruit. Then, indeed, will many forms of disease disappear, and healthier constitutions will be imparted to our rising generation.

CHLOROSIS: THE SPECIAL ANÆMIA OF YOUNG WOMEN. By E. Lloyd Jones, M.D., B.C. (Camb.), Pathologist for the Staff of Addenbroke's Hospital, Cambridge; late Research Scholar of the B.M.A., and late Demonstrator of Pathology in the University of Cambridge. London: Baillière, Tindall and Cox. Sydney: L. Bruck, 1897.

This is a report to the Scientific Grants Committee of the British Medical Association. The first part is devoted to a consideration of the different conditions of the blood which are coincident with differences of age, sex, temperament, &c.

The second part deals with a consideration of some of the characteristic features of chlorosis, and the author points out the significance of this special anæmia of young women, and the relation which it bears to conditions which are merely physiological.

In the third part Dr. Jones discusses briefly the prophylactic and therapeutic measures which he considers most likely to be successful.

Some excellent charts add value to the text.

PUBLIC SERVICE BOARD, 50 Young Street, Sydney.
6th May, 1898.—Applications are invited for the position of Medical Superintendent at the Coast Hospital, Little Bay. The position is in the Professional Division, Grade A1, and the salary is £600 per annum, with quarters, rations, fuel, light, and attendance. Candidates must be legally-qualified medical practitioners, and must not be more than forty-five years of age. Applications should reach the undersigned not later than the 28th May, 1898. By order of the Board, J. W. HOLLIMAN, Secretary. 9a76.

PUBLIC HEALTH.

THE Committee of the Queen Victoria Consumptive Homes Fund in Sydney decided on May 5 that the Executive Committee should take over the Thirlmere Home and part of the grounds on a lease of two years, as a temporary hospital for consumptives. The Hospital will be maintained by public subscriptions, by the interest accruing on the amount in hand (£12,600), and the aid which may be expected from the Government on the £ per £ system.

Smallpox has appeared among the passengers of the R.M.S. *Orizaba*. Many of the passengers had left the ship at Adelaide before the case was discovered.

At the meeting of the South Melbourne Council on 17th March, a letter was read from Mr. F. C. Dunn, city analyst, stating that he did not in all cases where samples of milk were taken for purposes of analysis examine for the presence of preservatives in the milk. He considered that in the present state of the health laws it was practically useless to examine for preservatives, as the Margarine Act sanctioned their use, and, in fact, defined butter as made exclusively from milk or cream, or both, with or without salt or other preservative. What was required was an amendment of the Health Act regulating the use of boracic acid, salicylic acid, and similar preservatives. If the authorities permitted their use, the vendor should be compelled to notify to the purchaser that the article contained preservatives, naming the chemical substance and the quantity, so that the purchaser might know what he was obtaining. The health committee reported that they had directed that in future analyses the presence of preservatives be referred to.

During March, 203 cases of typhoid were notified in Tasmania, this being the largest number on record, the next largest having been in 1889, when 168 were registered. Twenty deaths were recorded. The principal localities were Hobart 78, Beaconsfield 27, Longford 16, Queenstown 15, Launceston 13. Of scarlet fever there had been 67 cases, four times more than had occurred in any month during the last ten years, but the fever was of a milder type and no deaths had resulted; 38 of these cases were notified from the police district of Russell. Three cases of diphtheria were reported for the month.

A valuable tuberculin test was recently made by the Government Veterinary Surgeon in a herd at Kinloch, N.Z. Seventy-two animals were inoculated, and twenty-one reacted. The latter were killed, and *post-mortem* examinations revealed the presence of tuberculosis in every one of them.

Increased hospital accommodation is deemed necessary at Latrobe, Tasmania, owing to the influenza epidemic, which is taxing the funds of the local hospital, as two staffs of assistants are required.

The State school at Malmesbury, Vic., is closed owing to an outbreak of measles. Nine-tenths of the scholars are said to have been affected with the disease.

The State school at Broomfield, Vic., has been closed on account of the prevalence of typhoid fever in the district.

Dr. Robert Dick, Medical Officer of Health for the Hunter River Combined Districts, N.S.W., entered upon his duties on April 1st. His office is at Waratah, near Newcastle, N.S.W.

The Victorian Board of Health has passed a vote of thanks to Drs. Booth (Dunmunkle Shire), Andrew (Hawthorn), and Fetherston (Pahran) for their excellent reports, sent officially to the Board, dealing with the outbreak of typhoid fever in their respective districts.

VITAL STATISTICS.

SYDNEY.—There were 1049 births recorded in Sydney and suburbs during March. The number of deaths was 436. The principal causes of death were:—Scarlet fever, 5; diphtheria, 7; typhoid fever, 9; diarrhoea, 23; beri beri, 1; puerperal fever, 1; cancer, 29; tabes mesenterica, 6; tubercular meningitis, 5; phthisis, 36; apoplexy, 11; bronchitis, 10; pneumonia, 7; enteritis, 45.

BRISBANE.—During the month of February 144 births and 70 deaths were registered in Brisbane. There were 2 deaths from typhoid fever, 4 from dengue fever, 3 from whooping cough, 7 from cancer, 5 from phthisis, 3 from apoplexy, 2 from pneumonia, and 6 from enteritis.

ADELAIDE.—During the month of February there were registered in Adelaide 61 births and 97 deaths. There were 7 deaths from enteric fever, 6 from cancer, 10 from phthisis, 2 from pneumonia.

HOBART.—Dr. Gregory Sprott (Health Officer), reports that during the month of March there were 68 deaths registered in the Registration District of Hobart, but 6 of these were of persons not usually resident in the district. In the city there were 34 deaths (males 19, females 15), as compared with 32 deaths in the corresponding month of last year. The death rate for the month was, therefore, 18.92 per 1,000 per annum. The principal causes of death were—Typhoid fever, 6; diarrhoea, 1; cancer, 8; phthisis, 1; old age, 4; heart disease, 2; enteritis, 6; debility 3; and the remainder were of a general nature. Of the 34 deaths, 8 were of infants under 1 year of age, 3 between 1 and 5 years, 16 between 5 and 65, and 7 over 65 years of age. There were 81 births registered in the district; in the city, 63 (males 33, females 30).

UNIVERSITY AND HOSPITAL INTELLIGENCE.

MELBOURNE UNIVERSITY.

At a recent meeting of the Council of the University of Melbourne, Professor Irving being in the chair, on the motion of Dr. Morrison, Sir John Madden was re-elected Chancellor, and Sir Henry Wrixon was re-elected Vice-Chancellor; on the motion of Mr. Ellery, Mr. Kent Hughes, M.B., and Mr. J. F. Wilkinson, M.B., B.S., were appointed honorary assistant demonstrators in anatomy and physiology respectively.

LAUNCESTON HOSPITAL, TAS.—THE STAFF QUESTION.

A SPECIAL meeting of the Hospital Board was held on April 20th, 1898, to meet a deputation from the local branch of the British Medical Association with reference to their proposal for a change in the system of medical supervision at the hospital. Dr. Maddox in-

troduced the deputation, and in doing so, said their petition to the Board had been partly misunderstood. They never intended that medical men should take the management of the hospital into their own hands. All they wanted was the appointment of an honorary staff to supervise the medical and surgical work of the institution. Dr. Johnston said the Association recognised the hospital was excellently managed in everything else apart from the professional care of the sick. They held there should be an organised honorary staff to carry out a system of professional criticism of the great and important work which is at present done by the two resident surgeons. So long as the institution was merely a cottage hospital the present condition of affairs worked very well, but when the institution passed beyond that stage, as it had done, clearly the public had a right to demand that there should be some criticism, and especially of the grave professional work at the hospital. They were simply educating two professional gentlemen with the vast store of clinical material there at their disposal, and the result was that so soon as they gained their experience they left and went elsewhere. With a proper honorary staff that experience would be divided among the local practitioners, and the residents as a body would in the long run receive the benefit. Dr. Hogg spoke in the same strain, putting special stress upon the necessity which existed for special departments at the hospital. Dr. McCall pointed out that the present system was unfair to local practitioners, as it precluded them from anything but a very secondary part in the important work of the institution, which was all done by the resident surgeons. He referred to the practice in vogue in leading hospitals in the old country, which was on the lines now proposed by the Association.

The Chairman of the Board (Mr. G. T. Collins) said they were simply addressing the Board of Management. The hospital was worked under an Act of Parliament, and the proper course for the Association to adopt was to go to those who had the power to make alterations.

Dr. McCall: Yes; but you have power to recommend.

The Chairman admitted they had power to recommend, and would no doubt do so if called upon.

Several alterations were then suggested in the petition sent by the Association to the Board, and it was decided it should be amended by the Association before being sent to Parliament.

Dr. Clemons pointed out that all the ex-surgeon superintendents of the hospital, including Dr. Drake, who had just retired, were in favour of the change advocated by the Association.

The Chairman thanked the deputation for their courtesy in explaining their views to the Board. They would give every consideration to what had been said, and he could assure them, if the Board saw their way to adopting a system which would be better than the one now in vogue, they would do so. The difficulty they had was that the present system had worked so well for 15 years that they did not care about reverting to a system which proved a failure in the past. The Board was responsible for the expenditure at the hospital, and had to be careful. They had at present control over their medical staff, and they did not care about losing that control when they were responsible for the expenditure.

Dr. McCall returned thanks to the Board for receiving the deputation.

[It has been reported that it is not likely anything will be done until Parliament brings in an amending bill, and it is very questionable if the people in Launceston would support a measure making any change in the present management of the hospital.]

MEDICAL NOTES.

Death Under Chloroform.—A death during a surgical operation under chloroform occurred in private practice at Launceston, Tas., on March 22nd. The patient, a married woman, had undergone a similar operation three months previously under chloroform. At the necropsy "the heart was found to be soft and in process of fatty degeneration. There was also more fat about the heart than was usual."

Medical Magistrates.—Marshall A'Becket M'Carthy, L.B.C.P. Edin., L.R.C.S. Edin., &c., of Ormiston, Summer Hill, near Sydney, has been appointed a magistrate for New South Wales. George Murray Anderson, M.B. Aberd., and P. J. Rocket, M.B. Melb., have been appointed magistrates for Tasmania.

Presentations to Medical Men.—Dr. E. Ryan, the medical officer of the Nhill Hospital, Vic., has been banqueted by the inhabitants of Nhill prior to his departure for England. Dr. William George Armstrong has been presented with a handsome clock by the inhabitants of Bowral, N.S.W. The presentation was made by the Mayor on behalf of the subscribers on the occasion of the doctor leaving the district to take up the duties of Medical Officer of Health at Sydney.

Dr. Ernest Humphrey, of Townsville, Q., has been appointed a trustee of the Townsville Grammar School.

NAVAL AND MILITARY INTELLIGENCE.

Royal Navy (Australian Station).—Fleet-Surgeon F. J. Lilly has been appointed to the Royal Arthur; Surgeon G. J. Broatch to the Wallaroo; and Surgeon B. Miller to the Mildura.

N.S.W. Medical Staff Corps.—Hon. Surgeon-Lieutenant F. Wilson resigns his commission. Gerald S. Samuelson, M.D., appointed Hon. Surgeon-Lieutenant. N.Z. Native Rifles (Auckland).—Dr. William Finlay has been appointed Surgeon-Captain.

Queensland.—C. W. M. Davidson, L.R.C.P. & S. Edin., L.F.P.S. Glas., has been appointed Surgeon-Captain on the Medical Staff of the Queensland Defence Force (Land).

CHANGE OF ADDRESS, ETC.

ABBOTT, Dr. G. H., of Petersham, has succeeded to Dr. MacSweeney's practice at Stanmore, near Sydney.

CHEETHAM, Dr. FRANCIS, late of Beulah, Vic., has removed to Scottsdale, Tas., to carry on the practice of his deceased brother, Dr. E. J. Cheetham.

CORRY, Dr. W., has removed from Kingston to San Remo, Vic.

DAVID, Dr. ALFRED, late of Canada, has started practice at Launceston, Tas.

DAVIES, Dr. THOS., late of Hay, has commenced practice at Millthorpe, N.S.W.

DEANE, Dr., of Melbourne, will take charge of the practice of Dr. T. Ryan, Kaniva, Vic.

DIXEY, Dr. A., has settled at New Norfolk, Tas.

GILLIES, Dr. SINCLAIR, has commenced practice at 293 Elizabeth-street, Hyde Park, Sydney.

GOBE-GILLON, Dr., late of Sydney, has commenced practice at Patea (Taranaki), N.Z.

HOSKING, Dr. ARCHER, of Masterton, N.Z., has left for Klondyke.

JONES, Dr. B., has left San Remo for Eaglehawk, Vic.

LEARY, Dr., late of Dublin, has started practice at Burnie, Tas.

LISTER, Dr. HAROLD, late of Kew, Victoria, has started practice at Beaconsfield, Tas.

MACKEY, Dr. WM., has commenced practice at Crystal-street, Petersham, near Sydney.

MCDUGALL, Dr. R., formerly of Gladstone, has succeeded to the practice of Dr. Murray-Gibbes at Border Town, S.A.

NEWMAN, Dr. FRANK, late Resident Surgeon of the Melbourne Hospital, &c., has commenced practice at 28 Collins-street, Melbourne.

O'FLANAGAN, Dr. A. J., late of Merriwa, has commenced practice at Junee, N.S.W.

RYAN, Dr. T., will take charge of Dr. E. Ryan's practice at Nhill, Vic., during the absence of the latter for twelve months.

SCOTT, Dr. A. E., has commenced practice at Wewae, N.S.W.

WILLIAMS, Dr., the Resident Surgeon of the Thames District Hospital, N.Z., has left on a six months' trip to Europe.

WILLIAMS, Dr. W. E., late of Melbourne Hospital, has been appointed to Auckland Hospital, N.Z.

WILLMOTT, Dr., late of Hobart, has started practice in New Norfolk, Tas.

WOODFORD, Dr. A. E., has succeeded to Dr. Pring's practice at Uralla, N.S.W.

ZLOTKOWSKI, Dr. F. S., late of the Sydney Hospital for Sick Children, has commenced practice at Moree, N.S.W.

MEDICAL APPOINTMENTS.

The following medical appointments have been announced:

Chaffie, F. J., M.B. Melb., &c., to be a Public Vaccinator for South Australia.

Cory, Dr. G. O., to be Government Medical Officer at Binsara, N.S.W.

Cowen, H. O., M.B., to be Officer of Health for Borough of Baywood, Vic.

Corry, Wm., M.D., &c., to be Officer of Health for Shire of Phillip Island and Woolamai, Vic.

Crooks, A. W., L.R.C.P., &c., to be Public Vaccinator at Corryong, vice Dr. G. W. Armstrong, resigned.

Dixon, T. Storie, M.B. Edin., &c., to be a member of the Medical Board, N.S.W.

Docker, W. B., M.B., &c., to be Public Vaccinator at Women's Hospital, Melbourne, vice Dr. J. Balfour, resigned.

Elvins, Dr. F. H. H., to be Resident Surgeon at Ararat Hospital, Vic.

Harbison, J. W., M.B., &c., to be Acting Public Vaccinator at Kew, Vic.

Hawkes, C. S., M.R.C.S. Eng., &c., to be Acting Inspector of Pacific Islanders and Acting Assistant Immigration Agent at Rockhampton, Q.

Henzell, A. P., M.B., &c., to be Acting Health and Medical Officer at Mackay, Q.

Hickey, Dr. E. L., to be Government Medical Officer and Vaccinator at Nyngan, N.S.W., vice Dr. W. H. Jermy, resigned.

Jones, R., L.K.Q.C.P.L., &c., to be Officer of Health for Shire of Marong, Vic., and Acting Officer of Health for Eaglehawk, Vic., vice Dr. J. O. McKee, on leave.

McArthur, A. N., M.R.C.S. Eng., &c., to be House Surgeon General Hospital, Launceston, Tas.

Miles, G. Edward, L.R.C.P. Lond., &c., to be Medical Superintendent, Hospital for Insane, Rydalmere, N.S.W.

Mullen, W. L., M.A., M.D., &c., to be a member of the Dental Board of Victoria.

Palmer, G., M.B., to be Officer of Health for Shire of Ararat, Vic.

Reid, M. A., M.R.C.S., &c., to be Acting Public Vaccinator at Kerang, vice Dr. T. M. Austin, on leave.

Benwick, Sir Arthur, Kt., M.D., &c., to be President of the Medical Board, N.S.W., vice the late Dr. O. M'Kay.

Richards, S. J., M.B., &c., to be Medical Officer at Mount Morgan, Q., vice Dr. H. O. Brannigan, resigned.

Riley, A., M.R.C.S. Eng., &c., to be a Public Vaccinator for Winton District, N.Z.

Russell, E. Uscher, L.R.C.P. Edin., &c., to be Medical Superintendent of Hospital for Inane, Newcastle, and Health Officer for the Port of Newcastle, N.S.W.
 Salter, A. B. M.B., &c., to be Acting Health and Medical Officer at Thursday Island, Q.
 Sibbey, Dr. J. C., of Junee, has been elected Medical Officer of the Goodooga Hospital, N.S.W.
 Smead, J., L.F.P.S. Glas., &c., to be Public Vaccinator at Ararat, Vic. vice Dr. A. Bowe, resigned.
 Wilkinson, W. Camac, M.D. Lond., &c., to be a member of the Medical Board, N.S.W.
 Williamson, W. Cotter, M.D., &c., to be Medical Superintendent, Hospital for Inane, Gladsville, N.S.W.

MEDICAL RESIGNATIONS.

The following medical resignations have been announced:—
 Armstrong, Dr. G. W., as Public Vaccinator at Corryong, Vic.
 Balfour, Dr. J., as Public Vaccinator at the Women's Hospital, Melbourne.
 Bowe, A., L.R.C.P. &c., as Officer of Health for Shire of Ararat, Vic.
 Brannigan, Dr. H. C., as Medical Officer at Mount Morgan, Q.
 Edwards, George, of Minman, as Public Vaccinator.
 Jernyn, Dr. W. H., as Government Medical Officer and Vaccinator for Nyngan, N.S.W.
 Jones, R. L. K.Q.C.P.I., &c., as Officer of Health for Shire of Phillip Isl. and Woolamai, Vic.
 Palmer, Dr. G., as Resident Surgeon, Ararat Hospital, Vic.
 Say, H., M.D., as Member of the Portland Board of Advice, Tas.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Bray, Ernest James, M.B. Univ. din. 1896; Mast. Surg. Univ. Edin. 1896.
 Peri, Mathias Michal, M.B. Univ. Melb. 1898.

QUEENSLAND.

Additional Qualifications.

Moore, John Irwin, Fell. R. Coll. Surg. Irel. 1896; M.D., 1897, Univ. Brussels.

New Registrations.

Davidson, Christopher Wm., Lic. B. Coll. Phys. and Surg. Edin., 1896; Lic. Fac. Phys. and Surg. Glasg., 1896.
 Kane, Robert English, Lic. R. Coll. Phys. Edin., 1896; Lic. R. Coll. Surg. Edin., 1896.
 Murray, Geo. Lathrop, M.B., Ch. M. 1894, Univ. Sydney.
 O'Brien, Daniel Patrick, Lic. R. Coll. Phys. Irel., 1896; Lic. R. Coll. Surg. Irel., 1897.

Republished.

Pullin, Frank Bingley, Lic. Fac. Phys. and Surg. Glasg., 1879; Lic. R. Coll. Phys. Edin., 1879.

SOUTH AUSTRALIA.

Chapple, Frederic John, M.B., Melb., 1897.
 Cook, Harry Franklin, L.R.C.P., Lond., M.R.C.S., Eng., 1893.
 Douglas, Francis John, M.B., B.S., Melb., 1897.
 Kemana, Alfred James William, L.R.C.P. and S. and L.M., Edin. 1894; M.D., Brux., 1896.

Additional Qualification.

Gunsen, John Bernard, L.R.C.P., Lond., M.R.C.S., Eng., 1896.

TASMANIA.

Cheatham, Francis, L.R.C.P., L.M., Edin., 1881.
 David, Alfred, M.D., M.B. Queen's Coll., Kingston, Canada, 1873; L.R.C.P. and S., Kingston, Canada.
 Leary, W. A. B., M.B., B.Ch., B.A.O., Univ. Dubl., 1893.
 Lister, Harold, M.B., Melb., 1896.

VICTORIA.

Masters, Francis Hedley, M.B., 1897, Ch. B. 1896, Melb.
 Vines, Edward Prince, L.S.A. Lond. 1872; L. & L. Mid. B.C.S. Edin. 1876.
 Von See, Heinrich, Staats Examen Schwerin 1894.
 Additional qualifications registered, as Ch.B. Melb. 1898:—
 George William Armstrong, George Hugh Spencer Blackburne, Frederic John Chapple, Ethel Mary Vaughan Cowan, Wyatt Bristow Docker, Henry Francis Herbert Elvins, Albert Ernest

Frost, William Beaumont Heyward, William Arthur James, Henry Laurie, John Robert Lee, Robert George McPhee, David McMaster Officer, Mathias Michal Peri, Violet May Plummer, Douglas Andrew Shields, Thomas Walker Sinclair, Harold South, Percy Bloomfield Stewart, Godfrey Unwin Taylor.
 Additional qualifications registered, as M.D. Melb. 1896:—Arthur Gideon Hugh Colquhoun, Arthur Charles Frederick Halford, John Kildahl Richards.

WESTERN AUSTRALIA.

Watson, Alexander Eugene Henry, L.R.C.P., L.R.C.S. Edin.; L. Fac. P. and S., Glas. 1886.

NEW ZEALAND.

The following have applied for registration, and have deposited the evidence of their qualifications as required by law:—
 Cairns, William, M.B., C.M. Univ. Glas., 1889.
 Owen, Harold Edward, L.R.C.P. Lond., 1888.
 Murray, Alexander Lang, L.R.C.P. & S. Edin., L.F.P.S. Glas.
 Logan, William Archibald, M.D., Bach. Surg. Univ. N.Z.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

BOX.—On the 13th April, at Riaschella, Buckley Street, Footscray, Vic., the wife of Dr. John Box, of a daughter.
 DOAK.—On the 1st April, at Mosman, Sydney, the wife of Dr. Frank W. Doak, of twin sons.
 GRAY.—On the 26th April, at Himore, Vic., the wife of Dr. W. J. Gray, of a son.
 HENRY.—On the 20th April, at Walgett, N.S.W., the wife of the late J. E. Oram Henry, M.B., of a son.
 KENNEDY.—On the 17th April, at Cobram, Victoria, the wife of Dr. J. T. Kennedy of a daughter.
 LITCHFIELD.—On the 27th April, at her residence, 118 Glebe-road, Sydney, the wife of Dr. W. F. Litchfield, of a daughter.

MARRIAGES.

BARTLEY—FITZGERALD.—On the 20th April, at St. Patrick's Cathedral, Melbourne, by the Rev. J. H. O'Connell, Joseph Francis Bartley, M.B., Ch. B., Broken Hill, eldest son of the late John Bartley, of Bendigo, to Eleanor Mary Fitzgerald, only daughter of the late Edmund Plus Fitzgerald, Richmond.
 MACKAY—REID.—On the 20th April, at All Saints' Church, East St. Kilda, Victoria, by the Rev. C. E. Drought, Edward Alan Mackay, M.B., B.S., youngest son of the late Dr. Mackay, The Grange, Everton, to Ada Mary, elder daughter of the late John Reid, Reidsdale, St. Kilda.
 SHUTER—MARKHAM.—On April 18th, at Port Augusta, South Australia, by the Rev. W. H. Thompson, Richard Ernest Shuter, M.B., B.S., fifth son of Charles Shuter, Greendale, Victoria, to Rebecca Emily, only daughter of the late William Markham, M.D.
 WEBB—HOPWOOD.—On the 5th April, at Christ Church, North Adelaide, S.A., by the Ven. Archdeacon Farr, James Ramsay, M.B., B.S., F.R.C.S., son of Richard John Webb, late Victorian police force, to Mabel Emma, eldest daughter of James Outhbert Hopwood, of Stoke Newington, London.
 WILL—EWAN.—On the 30th March, at St. Stephen's Church, Phillip Street, Sydney, by the Rev. J. Ferguson, assisted by the Rev. Dr. Cameron, Alick Murray Will, M.B., C.M., of 219 Macquarie Street, Sydney, to Ethel Marion, eldest daughter of James Ewan, Glenleigh, Penrith.

DEATHS.

FLETCHER.—On the 18th February, at Bandawe Free Church of Scotland Mission Station, Lake Nyassa, Central Africa, Dr. Alfred W. Fletcher, B.Sc., M.B., C.M., of South Australia, third son of the late Rev. W. Roby Fletcher, M.A., aged 29 years.
 HENRY.—On the 20th April, at Walgett, N.S.W., Amy, the widow of the late J. E. Oram Henry, M.B., only daughter of Mr. and Mrs. W. H. Varley, North Sydney.
 WOODWARD.—On the 29th April, at Manar, Potts Point, Sydney, Katherine E. M., beloved wife of George P. M. Woodward, M.D., F.R.C.S., Railway Medical Officer, N.S.W., Dy. Surgeon General H. M. Imp. Forces (Ret.)

NEW SOUTH WALES MEDICAL BENEVOLENT FUND.

THE following subscriptions have been received during the month of April:—Drs. J. M. Gill, L. E. F. Neill, R. Pope, H. Lilie, S. Jamieson, W. C. Wilkinson, A. A. O'Hara, Chisholm Ross, J. L. M. McCreadie, R. J. Allan. The annual subscription of five shillings may be sent to F. W. Hall, M.D., 18 College St., Sydney.

STATISTICS OF THE AUSTRALASIAN COLONIES.

(Compiled in the Office of the Government Statist, Melbourne.)

I.—ESTIMATED POPULATION,* 1897.

Colony.	Estimated Population.				Number of—	
	Mean for 1897.	On 31st December, 1897.			Females to 100 Males.	Persons to the square mile.
		Males.	Females.	Total.		
Victoria... ..	1,172,790	595,402	580,836	1,176,238	97·55	13·38
New South Wales	1,310,550	709,360	614,100	1,323,460	86·57	4·28
Queensland	478,440	271,872	213,328	484,700	78·61	·72
South Australia—Proper ...	356,755	183,920	174,304	358,224	94·77	·94
Do. Northern Territory	4,877	4,418	402	4,820	9·10	·01
Western Australia	154,580	110,364	51,544	161,908	46·70	·17
Total	3,477,992	1,874,836	1,634,514	3,509,350	87·18	1·19
Tasmania	168,915	91,607	80,111	171,718	87·45	6·51
New Zealand	721,610	384,703	344,353	729,056	89·51	6·98
Grand Total	4,368,517	2,351,146	2,058,978	4,410,124	87·57	1·43

NOTE.—These figures may be slightly altered when the returns are finally examined. Net allowances have been made for unrecorded emigration during the year as follows:—Victoria, 8,428; New South Wales, by sea, 2321, and by rail, 1,434; Queensland, by rail, 24; South Australia, by rail, 1,808; Tasmania, by sea, 1,178.

* Exclusive of Aborigines, except in the case of Victoria and New South Wales. In the former colony, 565, and in the latter 8,380 were enumerated at the Census of 1891. The Maoris in New Zealand, who numbered 29,854 in 1896, are also excluded.

II.—MARRIAGES, BIRTHS, AND DEATHS.

Colony.	Number of—						
	Marriages.	Births of—			Deaths of		
		Males.	Females.	Total.	Males.	Females.	Total.
Victoria	7,454	16,005	15,297	31,802	8,533	6,595	15,128
New South Wales	8,810	18,983	18,259	37,242	8,310	5,964	14,274
Queensland	2,894	7,277	7,036	14,313	3,483	1,940	5,423
South Australia—Proper ...	1,949	4,881	4,654	9,535	2,192	1,781	3,973
Do. Northern Territory	4	16	11	27	64	7	71
Western Australia	1,659	2,053	1,977	4,030	1,837	831	2,668
Total	22,770	49,215	47,234	96,449	24,419	17,118	41,537
Tasmania	1,052	2,483	2,200	4,683	1,116	831	1,947
New Zealand	4,970	9,600	9,137	18,737	5,787	2,808	6,595
Grand Total	28,792	61,298	58,571	119,869	29,322	20,757	50,079

Colony.	Per 1,000 of the Population.			Males per 100 Females.		Excess of births over deaths	
	Marriages.	Births.	Deaths.	Born.	Died.	Numerical.	Centesimal.
Victoria	6·36	26·69	12·90	104·6	129·4	16,174	106·9
New South Wales	6·72	28·42	10·89	103·9	139·3	22,968	160·9
Queensland	6·05	29·92	11·33	103·4	179·5	8,890	163·9
South Australia—Proper ...	5·46	26·73	11·14	104·9	123·1	5,562	140·0
Do. Northern Territory	·82	5·53	14·56	145·5	914·3	—44	—62·0
Western Australia	10·73	26·07	17·26	103·9	221·1	1,862	51·0
Total	6·55	27·73	11·94	104·2	142·7	54,912	132·2
Tasmania	6·23	27·72	11·52	112·9	134·3	2,736	140·5
New Zealand	6·88	25·96	9·14	105·1	134·9	12,142	184·1
Grand Total	6·59	27·44	11·46	104·7	141·3	69,790	139·4

NOTE.—The figures in this table for some of the colonies may be slightly altered when the returns are finally examined.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

NOTES ON FIVE CASES OF LAPAROTOMY FOR PERFORATION OF HOLLOW VISCERA. FOUR RECOVERIES.

BY CHARLES P. B. CLUBBE, HON. SURGEON TO THE PRINCE ALFRED HOSPITAL, HON. SURGEON TO THE SYDNEY HOSPITAL FOR SICK CHILDREN, JOINT LECTURER ON CLINICAL SURGERY AT THE SYDNEY UNIVERSITY, SYDNEY.

THE five cases of perforation of hollow viscera that I wish to bring under your notice to-night, were all in the Prince Alfred Hospital under my care during the last ten months. Four of the cases made a good recovery. In the one that died, unfortunately the perforation could not be discovered during life. I will now read short notes of the cases in the order in which they occurred.

Case 1. M. S., aged 50, labourer, admitted to the Prince Alfred Hospital, July 21st, 1897, at 4 p.m. The patient states that while carrying a heavy sack of cement this morning about 11 a.m., he was suddenly prostrated by violent pains in the abdomen. He had to lie down at once, and these pains have continued on and off ever since. The pain seems worse near the umbilicus. He has not been feeling well for a few days, but he has not laid up. Last night he had very severe abdominal pain, which lasted for some time. Since the sudden attack this morning he has had an enema which acted. He began to vomit about one o'clock. He was very much collapsed when admitted, blue, and almost pulseless. Lies with his legs drawn up, abdominal muscles very rigid. 5 p.m. he was given chloroform and ether, the abdomen was opened in the middle line above the umbilicus. The peritoneal cavity contained some yellowish sticky fluid, no fecal odour; the intestines in places were covered with recent lymph. On going through the intestines a small perforation was found high up in the jejunum. This was inverted, and the serous coat was brought together with catgut sutures; abdomen flushed with sterilized water; glass drainage tube inserted; pulse got much better at end of the operation.

22nd July, 1897, patient very well, no pain, pulse good.

23rd July, 1897, some distention, bowels well open after enema. Slightly turbid fluid coming from the tube.

24th July, 1897, tube removed.

29th July, 1897, stitches removed, wound healed by first intention. He subsequently made a quick recovery and gave no cause for anxiety after the first day.

Case 2. Josephine H., aged 21, admitted to Prince Alfred Hospital, January 29th, 1898, at 9.45 p.m. History:—Patient states that she was taken with sudden pain in the abdomen about six o'clock this evening while walking upstairs. The pain was very acute and made her hold her breath. Abdomen soon began to swell up and became very tender all over, the pain was intense; did not vomit. She has suffered from indigestion for some time and has had a good deal of pain in the epigastric region, but there has been no vomiting; has been getting pale and weak lately.

On admission, 9.45 p.m., patient somewhat collapsed, in great pain, no vomiting, pulse 120° weak. Abdomen distended, tender, tympanitic all over, liver dullness lost. No dullness in flanks, tenderness is especially marked on left of epigastrium.

11 p.m., under ether, abdomen opened in middle line above umbilicus. Gas escaped on opening the peritoneum. Some flakes of inflammatory lymph were found on anterior surface of stomach. Under this lymph a small perforation was found about one quarter inch in diameter. Great chronic inflammatory thickening all round the perforation. The opening was closed by bringing the edges of the healthy peritoneum together with several catgut sutures. The abdomen was washed out with sterilised water; a large rubber tube was put into the upper part of the wound, and in this a strip of gauze was inserted. The wound was then closed in the usual way. She vomited slightly after the anæsthetic.

30th January, 1898. Slept fairly well, no pain, pulse 120°, good, bowels well open after enema; retains nutrient enemata well.

Later in the day she vomited most profusely, and in the vomit were some grape skins.

31st January, 1898, wound looks well, no more vomiting.

1st February, 1898. Dressings almost dry, tube removed. Water given by mouth to relieve thirst.

2nd February, 1898. Small quantities of Benger's Food given by mouth.

4th February, 1898. Stitches removed, slight suppuration in track of tube.

7th February, 1898. Takes any soft food now; had a small piece of bread and butter to-day for the first time.

26th February, 1898. Discharged cured.

Case 3. Ernest H., aged 18, a groom, admitted to the Prince Alfred Hospital, February 2, 1898, at 5 p.m. Patient states that he was kicked in the abdomen by a horse a little to the right of the umbilicus. The pain was so severe that he fell to the ground at once; this was two hours before admission.

On admission severe abdominal pain, abdomen tender all over, but especially about the umbilicus, not distended; vomited twice, no blood in vomit; no mark on skin of abdomen; passed clear urine; breathing, thoracic and painful; abdominal muscles on guard; pulse full and bounding; temp., 97.8°. No free fluid in abdomen; abdomen tympanitic and liver dullness obliterated; bowels not opened for two days before the accident.

9.45 p.m. Abdomen opened in the middle line above the umbilicus. On opening the peritoneal cavity no faecal odour was noticed. There was some dark coloured serum, and there were some flakes of lymph on some collapsed coils of intestine. In the upper part of the ileum a perforation was found about one quarter inch in diameter, the mucous membrane was everted through this, and the serous coat around for more than half-an-inch was greatly bruised. The peritoneal edges were stitched together over the perforation with fine catgut sutures. There were two other places where the intestine was much bruised, but had not perforated. One of these was stitched over. Abdomen was flushed out with hot water. Two rubber tubes were used, and the abdomen was closed in the usual way.

8th February, 1898, 10 a.m. Pulse full and bounding, does not complain of much pain, but is restless; temp., 98.8°; tubes removed and a gauze drain introduced; abdomen not distended; water given by bowel.

9th February, 1898, 9 a.m. Pulse, 134; temp., 102°. Very restless in night, got out of bed; abdomen not distended, slightly tender. Has vomited several times; bowels open after enema, some hard faeces passed.

10 p.m. Pulse, 116°; temp., 98°; respiration 32. Draining freely. Still vomits frequently.

10th February, 1898, 9 a.m. Slept well, pulse, 88; temp., 98°. Wound looks well, gauze almost dry, still vomits now and then; large soap and water enema, no result; ordered calomel, gr. 5.

11th February, 1898. Bowels well open after enema, passing flatus freely. Not vomiting.

Pulse, 104; temp., 99°. Takes milk and soda, beef peptonoids.

14th February, 1898. Stitches removed, wound has healed by first intention. After this the patient made an uninterrupted recovery and was discharged cured.

Case 4. V. L. On the morning of April 25th, the patient came to my rooms complaining of severe epigastric pain, aggravated by taking any food. She said any food made her feel sick, and that she vomited frequently. She had only returned from Bourke the day before, where she had been engaged in nursing some typhoid cases at the hospital. I told her to go home and go at once to bed, and to feed entirely on Benger's Food. I ordered her a mixture containing some bismuth, cocaine, and hydrocyanic acid.

April 26th. Patient seen in the evening. She had been vomiting all day, could retain nothing on stomach. Had been fed by nutrient enemata. The pain in the epigastric region was more intense and lasted continuously. To have morphia hypodermically when necessary. Pulse, 100; temp., 98.6°. Although there is great tenderness in epigastric region there is no sign of general peritonitis.

April 27th, 11 a.m. Symptoms and condition much the same as last night.

10 p.m. Nurse reports that a marked change for the worse came on about 3 p.m. Pulse now 144; temp., 99.8°. Abdomen now tender all over, somewhat distended, liver dullness absent, breathing entirely thoracic. As it was evident that a perforation had taken place I got Dr. W. Chisholm to come out and see her with me before getting her removed to a hospital. Dr. Chisholm saw her at 11 p.m., and agreed with me as to diagnosis, and also as to the necessity for operating without delay.

April 28th. The patient arrived at the Prince Alfred Hospital at 2 a.m. She was taken at once to the operating theatre. The abdomen was opened in the middle line above the umbilicus. The peritoneum appeared to be injected and was somewhat sticky. No lymph to be seen. The stomach when brought into view appeared to be inflamed, but no perforation could be seen on anterior surface. The omentum was then separated and the posterior surface of the stomach was examined, but no sign of a perforation could be discovered. The stomach was then replaced and the region of the appendix examined for some clue to account for the symptoms, but nothing abnormal was found in that direction. The abdomen was then closed, no drain being

inserted. The patient stood the operation well, and her pulse was fair at the end of it.

10 a.m. No vomiting, patient does not complain of pain, but looks very collapsed. Pulse 140.

8 p.m. General condition much worse. Pulse can hardly be felt at the wrist. To have hypodermics of strychnine every hour. She never rallied and died about 11 a.m. the next day. At the examination which was made after death, a small perforation was found high up on the posterior surface at the cardiac end where the œsophagus joins the stomach. A situation in which it could be neither seen nor reached during life.

Case 5. R. C., aged 19. Admitted to the Prince Alfred Hospital, April 27th, 1898.

History.—Patient states that to-day about noon she was suddenly seized with a violent pain in the epigastrium. Half-an-hour later she vomited, and in the vomit she noticed some blood. She has had slight epigastric pain and occasional vomiting for the last few weeks, sometimes the vomit has had the appearance of coffee grounds.

On examination she was somewhat collapsed, pulse quick, but fair; temp., 98°; abdomen tender all over, slightly distended. Liver dulness obliterated up to mid-axillary line, respiration seems difficult, knees not drawn up.

April 28th, 1898, about 30 hours after onset of symptoms, under chloroform, the abdomen was opened in the middle line above the umbilicus. Peritoneum was found to be very sodden and œdematous. A large quantity of lymph thrown out over the intestines and stomach. On anterior surface there was a great deal of thickening of stomach wall extending over an area of nearly two square inches. In the centre of this thickened area there was a slit like perforation. This opening was very difficult to close because the stomach wall would not hold the stitches near the opening, and there was so much thickening around that it was almost impossible to get the edges inverted. However, at last the opening was closed by inserting the stitches an inch away from the perforation and taking them an inch the other side and drawing on them gently. Some omentum was afterwards placed over the mended part. While pulling down the stomach to get a view of the damaged part a large amount of the contents of the stomach escaped into the general peritoneal cavity in spite of the sponges which were packed around. An opening was made below the umbilicus, and the abdomen was very thoroughly flushed out with hot water and afterwards with boracic lotion.

A glass tube was put in the lower opening down into the pouch of Douglas. The upper incision was drained by means of strips of iodoform gauze placed in two directions. The abdomen was then closed in the usual way.

10 p.m. The patient has vomited several times after the anæsthetic. Pulse 136, fairly good. The drains are acting well.

April 24th, 1898. Patient slept on and off during the night, is distended this morning; complains of slight pain; fluid still being drawn off by tube, and is still slightly blood-stained; no vomiting since last night. Pulse, 124; temp., 98°; respiration, 28°. Enema given with no result; passed flatus through rectal tube. The glass drainage tube removed and the gauze was changed.

April 30th, 1898. Bowel open twice during the night; vomited once; pulse good, 112; much less distended. Gauze removed from upper wound and stitch tightened. Is being fed entirely by nutrient enemata, which she gets every three hours, and retains well.

May 5th, i.e., seven days after the operation, the patient was given some beef peptonoids by mouth for the first time. She has had no bad symptoms, and is progressing well in every way.

May 8th, 1898. Is now taking peptonised milk and Benger's food, by mouth, in small quantities, the enemata are being gradually left off. After this the patient made a rapid recovery, and will be discharged cured in a few days.

Remarks.—It is difficult to get any reliable statistics as to the mortality after operation for perforating gastric ulcer. Last year Weir published in the *New York Medical News*, a list containing twenty-six recoveries after laparotomy for gastric ulcer, and Dr. Stawell in his paper on gastric ulcer in the April number of "*St. Bartholomew's Hospital Journal*" tells us that he has found records of nineteen other successful cases. This means that there are on record forty-four successful cases, but it does not tell us what percentage of the cases that are operated on recover. Dr. Dreshfeld in the article on ulcer of the stomach in Allbutt's "*System of Medicine*," says:—"Jowers tabulated twenty-five cases, of which eight recovered. Barling collected thirty-seven cases with thirteen recoveries." He also tells us that the mortality is 95 per cent. if these cases of perforating gastric ulcer are left alone.

It is now only five years since Krieger published the first successful case of laparotomy for gastric ulcer, and Dr. Stawell in the paper referred above, says that it is only a year ago

inner glass-ended tube is somewhat of an innovation, I believe, and one which needs but to be used to be appreciated.

To return to the patient. The offending nob-like ring was removed, and a wedge cut out of the lower part of the prostatic urethra, so as to give a low level channel at the internal orifice of the urethra, then by means of an ordinary median cystotomy a glass tube was passed perineally into the bladder and tied there.

The bladder wall of the supra pubic wound was sutured with catgut. Silkworm gut sutures were passed through the abdominal wound, and the wound stuffed with iodoform gauze for two days, and then the sutures were tied. This man has remained perfectly well for over two years.

No. II. was 56 years old, with a similar growth and history, ten months catheter life and a very dirty bladder. He was somewhat wanting in intelligence, and owing to his neglect in attending to his bladder, he by some means allowed it to become overdistended on several occasions, and had to resort to the catheter, cystitis returned, and he came to me with an irritable bladder, septic urine, and symptoms of stone.

I opened supra pubically, and removed a phosphatic stone the size of a pigeon's egg. I was pleased to note at the time that there was no trace of return of the prostatic overgrowth, but that the mucous membrane drooped in folds about the internal orifice of the urethra. I therefore removed a V-shaped piece above and below the orifice, and drained through the perineum as before. This man has now been out of hospital for nine months. He passes his urine in a normal way, though I feel that it is necessary for him to wash out his bladder occasionally, for he had 1 oz. of residual urine the last time I saw him.

No. III. was a man of 60, with a similar prostatic history and four months catheter life. He was much annoyed by urethritis and cystitis. The growth was like the others, but smaller, and the operative treatment was similar.

Strange to say the last time I saw the old man he was passing a very good stream at a street corner in the suburbs, and judging by the hilarious way in which he greeted me I should say he was decidedly "in poculis."

No. IV., 52 years of age, gave a history of twelve months gradually increasing difficulty in voiding his urine, beginning with delay in starting the act till at length he was brought to catheter life, an existence which he had been leading for some six weeks.

In this case I found a tongue-shaped projection in the prostatic urethra which was effectually blocking the urinary passage, and was projecting slightly into the bladder, I removed this without difficulty by means of scissors through the perineal wound, assisted by the forefinger introduced through the supra pubic wound. This patient left hospital in a satisfactory condition five months ago, and I have not seen him since.

Orchitis occurred in cases I., II. and IV. in the right testicle, and in case III. in the left testicle, towards the end of the first or in the second week.

Case III. had great pain at the point of the penis for two or three days, due, I fancy, to his prostatic urethra being stretched instead of incised in order to pass the drainage tube.

While operating on case III. my assistant accidentally pushed the sound through the bladder into the peritoneal cavity. I recognised this at once, and allowed the instrument to remain where it was till I had opened the peritoneal cavity by enlarging the wound. A little fluid had escaped, but was soon sponged away, and the hole was drawn up and attached to the abdominal wound. It was at this time that I noticed how easily a very large incision could be made into the bladder, and at the same time avoiding opening the peritoneal cavity by simply pushing back the peritoneum from the bladder and finally fastening the upper end of the bladder wound into the abdominal incision so as to allow no bagging at the point of separation of bladder and peritoneum.

No evil result followed the escape of fluid in this instance; the operation was proceeded with as before.

The comfort and efficacy of the perineal drain I have before advocated, and it certainly more seriously complicates matters, though after the tube is discontinued the perineal wound takes longer to completely close than is usually the case in young men.

There seems to have been some difficulty in the recognition of the cause of these patients' inability to pass urine, and mainly for the reason that we are too inclined to the belief that a prostatic enlargement sufficient to prevent a man from passing urine must necessarily betray its presence to a rectal examination.

In none of these cases did rectal examination afford the slightest assistance, but the prostatic history was present in all its familiar phases.

When we come to consider the grievous effects resulting from an inability to empty the bladder, how that at first there is residual urine with an increasing hypertrophy and dilatation

of the bladder wall, followed very frequently by cystitis, pyelitis and disorganisation of the kidneys, we cannot but be impressed with the supreme importance of detecting and removing the obstruction to free micturition before kidney trouble has manifested itself.

There is no doubt but that a great number of the deaths after prostatectomy are due to the inefficiency of the kidneys to discharge their proper excretory function.

I am well aware that some old folk get along very well if taught to regularly catheterize themselves, and I also know that cystitis and urethritis frequently follow this self-treatment.

Successful operative treatment would be much more common were we able to lessen the mortality, and this lowering of the mortality depends in a marked degree on the early diagnosis of these cases, and also on a line of treatment that will ensure a free removal of all obstruction, followed by a careful and thorough drainage of the bladder for a short period. This, I maintain, is most surely and safely effected by a supra pubic removal and a perineal drain.

The deplorable plight of these patients, and their singular similarity, induced me to record them, for a sufficient length of time has elapsed since the operation to give one a fair idea of the agreeable nature of the prognosis one may supply to those who seek relief.

SERUM DIAGNOSIS IN CHILDREN.

By D. McMASTER OFFICER, M.B., MELBOURNE.

The following note should have been added to Dr. Officer's paper, published last month:—

TO PRESERVE THE REACTION.

After a reaction has taken place, the coverslip is carefully lifted off the hanging-drop slide, excess of vaseline wiped off, and then the serum and bacilli on the coverslip are carefully dried over a flame, then fixed in the usual way—drop the coverslip into alcohol or ether to dissolve off every trace of vaseline, then stain the fixed specimen with methyl blue or Loeffler's blue, when the clumps will come out well and the unclumped bacilli as single organisms stained blue.

Messrs. ANGUS & ROBERTSON have published, in one volume, the papers entitled *A Brief History of Smallpox and Vaccination in New South Wales, from the Foundation of the Colony to the Present Day*. By Dr. G. L. Mullins. These papers originally appeared in the columns of the *A. M. Gazette*.

NOTES ON A CASE OF PROSTATECTOMY.

By R. GORDON CRAIG, M.B., CH.M. SYD.,
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THIS patient, J. Mc—, 66 years of age, was a thin wiry Scotchman, who had led an active life as goldminer up to the age of fifty years. At that age he began to have some difficulty in passing water, amounting to slight hesitancy in starting the stream, with pain at the end of the penis relieved by the act of micturition. Up to two years previous to the operation, however, he was able by straining hard to empty the bladder, but since then he has been conscious of the fact that the bladder was not emptied. The latter three and a half months he has not been able to have more than an hour's rest. When attempting to pass water he could not; but as the involuntary straining would pass off about half a teacupful would dribble away. At this stage he came under my notice.

On examination of the abdomen, I found the bladder extended to two inches above the umbilicus. Rectal examination did not reveal any enlargement of the prostate. On cystoscopic examination of the bladder, one could make out a small prominence of the middle lobe of the gland. The urine was fairly clear, neutral, and contained a trace of albumen and pus. At the first sitting I drew off forty ounces of urine, and still left the bladder distended to two inches above the pubes. At the end of five days, I emptied the bladder completely. This, of course, was done, knowing the dangers of the sudden emptying of an over-distended bladder. I would estimate that the bladder, when I first saw him, contained between eighty and one hundred ounces. For six weeks the bladder was washed out with a quart of one per cent. Boracic Acid solution night and morning. At the end of this period the expulsive power of the bladder had improved considerably, but still the last eight ounces of urine had to be got rid of by pressure on the hypo-gastrium. The urine now was acid, pus just a trace, no albumen.

Operation.—The bladder was distended with fifteen ounces of Boracic lotion; no rectal bag was used; the usual supra pubic opening made, and no difficulty was found in making an incision of an inch and a half in bladder-wall. On retracting the edge of the incision, one could see and feel a small valve-like process overlying the cystic orifice of the urethra, partly composed of hypertrophied mucous membrane,

partly of prostatic tissue. The bladder-walls bulged inwards, and were fairly smooth, not sacculated. The growth was seized with vulsellum forceps, well drawn up and removed by snipping with a pair of curved scissors held in antero-posterior direction. Hæmorrhage was slight and easily controlled by pressure with a pad of gauze. The patient was then placed in the lithotomy position, and median cystotomy performed for the purpose of drainage, the supra pubic wound was stitched with silk worm gut, the sutures on each side pulled on, but not tied, so as to bring the edges of the bladder incision together, and the wound in abdominal wall packed with iodoform gauze.

A glass vaginal tube, half inch in diameter, with the holes in the bulbous end enlarged, was used as a perineal drain. A length of red-rubber tubing carried off the urine to a receptacle at bedside. The operation was completed under an hour.

Recovery was uninterrupted. The drainage tube was removed each day, and the bladder irrigated with a quart of Boracic solution. The gauze packing in the suprapubic wound was removed at the end of forty-eight hours; the raw surfaces being healthy, the sutures were tied. No leakage had taken place during this time. In nine days the sutures were removed, and the healing was indistinguishable from that of a wound that has united by first intention. The perineal drainage acted well. The patient was kept quite dry, and he suffered no inconvenience from the size of the tube. In a fortnight the tube was removed, and in three weeks from the operation he was walking about. The perineal wound closed a fortnight later. The temperature did not rise above 99.6° F.

Two years have now elapsed since the operation, and during this time I have not lost sight of the patient. At times he was subject to attacks of catarrhal cystitis, which lasted for about a week or fortnight. For this, I prescribed powdered Boracic Acid, directing the patient to take a salt-spoonful (equivalent to about 10 grs.) after meals. I tried salol without good results, as also other drugs. I found, too, that the Boracic Acid was continued more regularly with more satisfactory results, and with less disturbance to the general health than the other preparations. It is also cheaper, which fact, no doubt, appealed to a Scotchman. The patient can now rest the entire night, except on rare occasions, when he may have to get up once—an occurrence which happens even in health. At the time of the operation, he weighed eight stone, he now weighs nine, and feels in the best of health.

Remarks.—The immediate and remote results of surgical interference of this character are often markedly different, and if the records of cases are to be of any value, they must include an account of the remote results of the operation.

The main feature in this case is the demonstration of the recuperative power of the bladder. The patient was conscious of the fact that there was residual urine for two years; and no doubt such existed to a smaller degree some time before that. The subsequent history of the case shows that the length of time an obstructive condition has existed is not so much a guide to operative interference as the behaviour of the case under systematic irrigation of the bladder.

The satisfactory issue in this case was due as much, in my opinion, to the efficient perineal drainage as to the removal of the prostatic obstruction. With this method of drainage, one had no trouble in removing, by irrigation, the thick muco-purulent sediment that collects in the post-prostatic pouch. This removal prevents the formation of toxins, which act on both the prostatic and suprapubic wound, and which cause that superficial creeping gangrenous condition in these situations. The absorption of the toxins from the decomposing urine and from the superficial necrosis of tissue in the wounds, is, I think, the main factor in the causation of that asthenic condition, not unfrequently ending in death, which supervenes in some cases of supra pubic operations.

The treatment of the suprapubic wound adopted here is a rational one, as it admits of one modifying the course of treatment according to the behaviour of the wound at the end of forty-eight hours, and gives a result that is practically that of healing by first intention, without the attendant risks of immediate suture of the wound.

How many of our readers are able to judge the real value of a cycle? Are not many persons, especially tyros, tempted by low price rather than quality when looking about for their mounts? The experienced cyclist, however, knows that it is far cheaper in the long run to purchase a machine which has stood the severest test for years; because, in the cheap made bicycle, endless repairs and dissatisfaction inevitably follow.

We draw attention to the Austral Cycle Agency's advertisement on page viii. Some good points about "Swift" cycles fitted with Dunlop tyres are mentioned. We might add that these machines have been before the public for 30 years, and the fact that to day all Australian records are held by "Swifts" is sufficient guarantee of their speed and durability. We need scarcely add that medical men require the best bicycles on the market, as they are called upon to ride over all sorts and conditions of roads in all weathers.

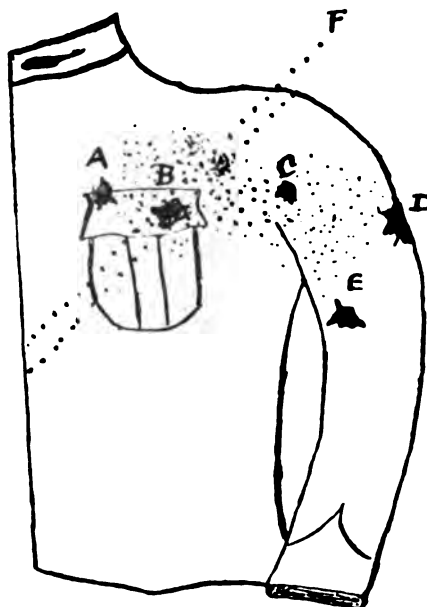
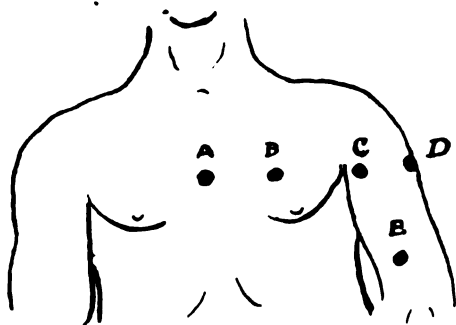
A CASE OF GUNSHOT WOUND

(ILLUSTRATED).

BY TERENCE A. GREEN, M.B., SURGEON
CAPTAIN, M.S.C., SYDNEY.(REPORTED BY PERMISSION OF SURG. COL. WILLIAMS,
P.M.O.)

THE following case is of interest, not so much as an illustration of an ordinary gunshot wound, but from the amount of damage which is possible to occur as the result of a blank charge. The piece of artillery was a gatling gun, and the accident occurred in the course of the military manoeuvres of the late Easter encampment. The patient was a healthy lad of eighteen years of age, and he gives the following account of the occurrence:—He was

the axilla, was superficial, and marked chiefly by abrasions and the bruising of the skin. The wad was found under the clothing. The third and fourth wounds were in the same horizontal line in the upper arm, the innermost passing obliquely into the deltoid muscle for one inch, the outermost merely grazing the outer aspect of the arm. The fifth wound was several inches lower down, and entered for half an inch obliquely into the lower part of the biceps. The wads were extracted, and the after treatment carried out by Surgeon Capt. Green and Surgeon Lieut. Martin. The wounds healed uninterruptedly, the patient suffering from neither shock nor any other complication. The annexed diagrams sufficiently illustrate the position of the wounds. The wads were made



doubling in pursuit of a retreating party when the latter turned and re-opened fire, the patient at this time was within six paces of the gun which was fired point blank upon him. He immediately fell backwards. He was conveyed, without delay, by a party of the medical staff corps under Surgeon Lieut. Martin, to the main field hospital.

On examination, five distinct wounds were discovered, corresponding to the five barrels of the gatling gun. Four of them were ranged in a horizontal line corresponding to the level of the third rib. The most internal was a shallow wound upon which the wad was lying. The second wound, midway between the first and

of waxed cardboard, and had practically under gone no injury. On examination, they were found to be circular discs about one-eighth of an inch in thickness and half-an-inch in diameter. They each weighed six grains.

The following points are worth noting with regard to condition of coat and accoutrements. In the upper part of the coat on the left side, together with the sleeves, there is much damage done, not only by the perforations caused by the wads, but also by penetration of gunpowder grains. The main condition is shown by the diagram.

The most interesting point to be noted is in connection with the aperture marked B in the

diagram, the wad in this case first penetrated through the waterbottle strap, a strong band of leather fully one-eighth of an inch in thickness, after this it pierced four layers of stout cloth and a pocket handkerchief, finally causing the abrasion already described. The other points of interest being the depth of the wounds marked C and E in the diagrams. The wound E passed into the biceps in an upward direction owing to the fact that the axis of the limb was directed forwards as the man was advancing at the double. The case is of interest as proving the power of penetration that a wad may possess when discharged from a modern machine gun. It is also noteworthy that the wound B might easily have been fatal had the patient not been protected by a stout leather strap and several layers of cloth.

UNCONTROLLABLE VOMITING FROM CHILDHOOD—PRODUCING GASTRIC ULCER—EXTREME EMACIATION—ABDOMINAL SECTION—CURE.

BY GEORGE DE CLIVE-LOWE, L.R.C.P., L.R.C.S., L.F.P. AND S., L.M. EDIN. AND GLAS., GOVERNMENT MEDICAL OFFICER, M.O.H., ETC., ETC., HOKIANGA, AUCKLAND, NEW ZEALAND.

Miss M. N., *æt.* 22 years, first came under my care in October, 1897, complaining of constant pain and a sense of dragging in the right iliac fossa, and "small of the back." She, furthermore, complained of a sense of something moving, which seemed to alter its position during the acts of inspiration and expiration, noticeably so when in the recumbent position.

When asked some leading questions as to the urinary functions, patient complained of dysuria, the urine often being scanty, of dark colour, and offensive in odour. The period from which she could date these symptoms was so indefinite that I cannot state it with any precision, suffice it to say that they had been in evidence for many months. Miss N. is a first-rate horse-woman, and was in the habit of spending many hours daily in the saddle. Having met with such cases before, I had mentally come to the conclusion that this was a case of floating kidney.

When I had examined her, I found a body, painful on pressure, rather larger than, but of the same shape as the kidney, freely movable and lying in the right iliac fossa. I told her this was a floating kidney, and advised the "paddock-belt" treatment to be tried for some months,

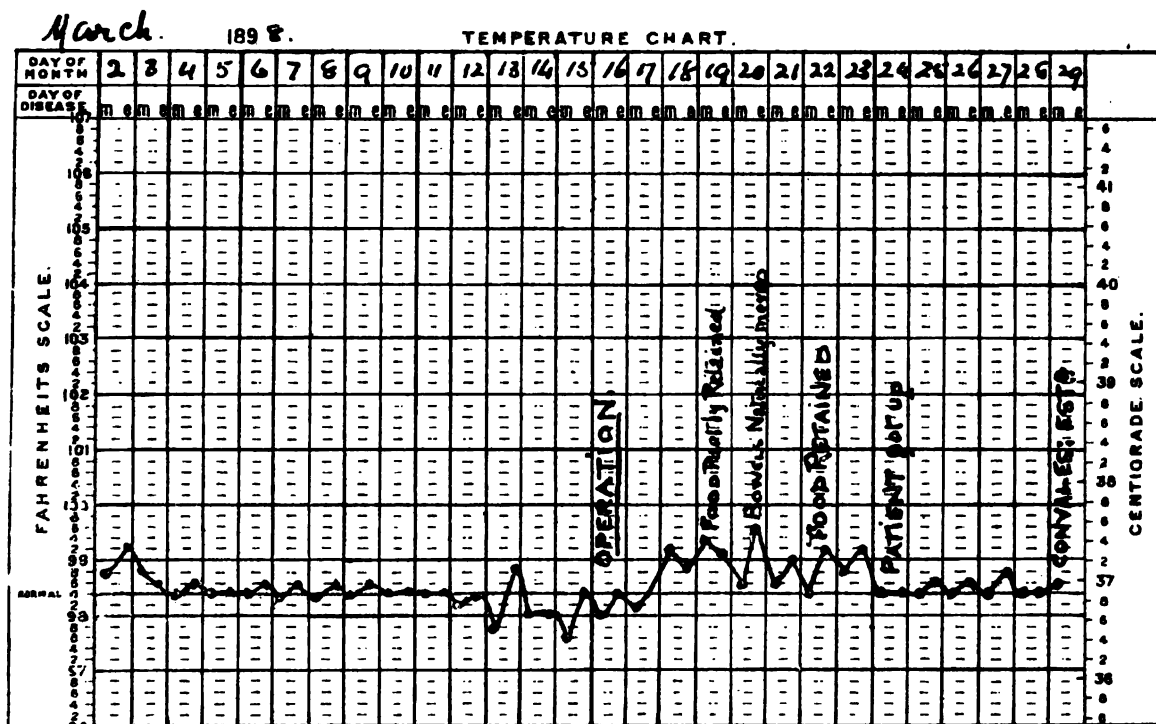
in the hope that this might do away with the necessity of cutting down and stitching the organ in position. Mr. C. Ratjen, chemist, of Auckland, executed my order for the belt, and the patient wore it for one month. When I next examined her, at Rawene, I found no appreciable difference in her condition, and it was then that she complained to me of symptoms of acute gastric catarrh, and told me that for many years—indeed, as far back as she could remember—she had been sick, and vomited every morning. Her mother, who was present, corroborated this statement, and said that even as an infant her daughter had had great trouble in retaining nourishment. It seemed that the food was regurgitated with ease, but that this act was accompanied by a feeling of extreme nausea. At this time (November, 1897) gastralgia, and a feeling of intense discomfort after food were complained of. Accompanying this there was the complication of acute dysmenorrhœa. These new features in the case led me to investigate carefully the gastric and reproductive systems. I must admit that I fallaciously under-estimated the importance of the symptoms complained of, taking into account the highly neurotic temperament of my patient. I could find no dilatation of the stomach, but percussion invariably elicited a sense of nausea and severe pain. Both ovaries I found very painful on pressure.

At this stage I prescribed strychnine thrice daily before food, and pepsin *et* Bismuth Co. thrice daily after food, regulating the diet accordingly. As regards the dysmenorrhœa, I placed the patient on appropriate treatment, and ordered that during the "flow" suppositories consisting of belladonna and opium should be used, together with a rectal injection of asafœtida. Three weeks later the menses made their appearance, and, in accordance with the instructions I had given, a suppository was introduced. In the course of a few minutes intense vomiting took place, followed in an hour or so by an evacuation from the bowel, consisting of a quantity of digested blood. The retching and vomiting continued, and the patient was unable to retain any food whatsoever in the stomach. To complicate matters, gastric ulcer made its appearance, and profuse hæmatemesis took place. On December 21, 1897, she came to Rawene, to be under my constant observation.

The "X" Rays, which I now used, revealed the fact that there was no deep-seated tumour, which I had been unable to make out by palpation, nor could any neoplasm be discovered in the region of the pylorus.

The retching and vomiting still continued, the ejected matters consisting of bile, and a frothy mucous, indicating the catarrhal state which must have existed in the stomach. The bowels became quite inactive, refusing to respond even to the enema. I placed her upon Peptonized Benger's Food, administered in $1\frac{1}{2}$ ounce enemata every two hours. Pancreatized beef-tea and pancreatized milk were also given in the form of enemata. Two drachms of brandy were exhibited *nocte manequa*, but little if any retained. Soon the bowel became intolerant

organ or organs, which so interfered with its peristaltic action as to cause or induce regurgitation of its contents, or that there must be some congenital malformation of the viscus. This conclusion I arrived at for the following reasons:—(1) Constant sickness during infancy; (2) Nausea and regurgitation of food at irregular hours daily, from childhood to present date; (3) The absence of any deep-seated tumour, as evidenced by palpation; (4) The negative result of inspection by the "X" Rays; (5) The irregular action of the bowels, and frequent periods of constipation.



of enemata, and extremely painful, which caused me to substitute B. W. & Co.'s zymized beef suppositories, one of which was introduced four times daily.

I may state that every form of medicament known to me for external or internal use, in cases of uncontrollable vomiting, was employed without avail. The stomach I washed out on several occasions with warm boric acid solution (1-40) without any appreciable result.

The patient was becoming much emaciated, and after careful consideration of this condition, I determined that there must either be some adhesion of the stomach to a neighbouring

At this stage of the case I explained to the parents my views upon the matter, and told them that, given their own and the patient's consent, I had decided to operate, after having consulted with my colleague, Dr. Arthur T. Scott. The patient and parents willingly agreed to any measures I chose to adopt, appreciating the undoubted fact that were the existing conditions to last, death must surely result at no distant period.

Dr. Scott, after mature consideration, coincided in toto with my views of the case, and with me advised operation as soon as possible.

On Monday, the 1st day of March, 1898, I engaged the special services of nurse Alice Hattaway, of Auckland, and on March 2nd, special pre-operative treatment was commenced. For 14 days (i.e. till the 16th, the day on which we had decided to operate) the patient was again placed on the pancreatized enemata of beef-tea and milk—1½ ounces every two hours. Two drachms of brandy were administered per os night and morning, but seldom retained. The zymized beef suppositories were administered more frequently at this stage, and seemed to suit her admirably.

The pulse was extremely rapid and weak, the tongue fissured, cracked, and dry, and thickly coated with a brown fur. Two days previous to the operation, the room in which we had decided to operate was thoroughly carbolicised by nurse Hattaway, the bed raised on blocks—and thus the necessity of moving the patient after the operation was obviated. On the evening previous to the operation, the entire surface of the abdomen was rendered scrupulously aseptic, and a carbolic compress applied.

On the 16th March, at 9 a.m., the bowels were well washed out, and the stomach irrigated with Oii. of warm boric lotion, sponges, instruments, towels, and every article made use of in the operating room were also rendered aseptic. The towels, dressings, bed-clothes, and patient's bed-dress, I directed to be roasted over night with antiseptic precautions.

At 11.40 a.m. on the 16th March, Dr. Scott began the administration of the chloroform, and maintained complete narcosis till the completion of the operation. Half an hour previously, by my instructions, Nurse Hattaway had given one hundredth of a grain of Strychnine Nitrate, hypodermically.

I made an incision, extending from half an inch below the ensiform cartilage above to half an inch above the umbilicus below, in the middle line. The anterior layer of the sheath of the rectus was opened and the fibres of the muscle itself separated, but all hæmorrhage, which was profuse, was completely controlled before the posterior layer of the sheath was opened. The peritoneum I opened on the director, and, before introducing my hand into the abdominal cavity, I took the precaution to run a silk loop through the entire thickness of the abdominal wall on each side of my incision, including the peritoneum, thus preventing the retraction of the parietal layer from the edges of the wound.

The stomach I found low down, small, flaccid, empty, and bound down firmly by

numerous bands to the left lobe of the liver above, and to the intestine below, thus confirming our diagnosis. There was no evidence of tumour. The gall-bladder was *enormously* distended, to which I called the attention of Dr. Scott and Nurse Hattaway. The right kidney I found freely movable, and having a meso-nephron at least three and a half inches long.

To return to the stomach: I passed my finger through all the bands binding that viscus to the intestine below, but, dreading the occurrence of profuse hæmorrhage which I might have been unable to check had I entirely separated the adhesions to the liver above, I contented myself with breaking down those which offered the least resistance. The peritoneal cavity was irrigated with 1-40 Boric Acid solution and a weak solution of Sod. Salic. I approximated the two edges of peritoneum with a continuous suture of very fine China silk. The posterior layer of the sheath of the rectus I brought together with a continuous suture of coarser China silk, while the muscle itself and the anterior layer of the sheath I approximated by means of interrupted sutures of coarse China silk. The cellular tissue and skin I united by eight interrupted sutures of silkworm gut. I dressed the wound with iodoform gauze and carbolic wool, keeping all in place by means of a carbolicised cheese-cloth and flannelette binder.

Retching was very violent for six days. On the second day after the operation, the wound was dressed. Healing by first intention had taken place, and there was the minimum degree of inflammation. From the accompanying chart, it may be seen that the highest temperature was reached on the evening of the fourth day after operation, viz., 99.6°, which immediately dropped on a free and natural action of the bowels taking place.

Immediately after her return to consciousness I directed that iced milk and water should be given per os, half and half, in tablespoonful doses every hour, and that the zymized suppositories, one every three hours, be continued. On the 18th, Calomel (½ gr.) was ordered to be given each morning. On March 19th, her food, which now consisted of milk, beef-tea, and calves-foot jelly, was partly retained. On the 22nd, all food administered was retained without discomfort. On the 24th, the suppositories were discontinued, nourishment by mouth was greatly increased, and patient craved for tea. On this day, also, the patient was allowed to leave her bed and lie on a couch for three-quarters of an hour. The

stitches were also removed. On the 29th, convalescence was so far established that the patient was allowed to walk about, and strong, light, nourishing food was taken at frequent intervals. In the thirteen days since the operation, the patient has gained flesh rapidly and is better in every way. A hypodermic injection of Strychnine Nitrate (one hundredth of a grain) has been given daily at 3 p.m., and to this I attribute the regularity of the bowels.

During the operation, I had the valuable assistance of Dr. Arthur Scott. Nurse Hattaway, whom I cannot compliment too highly, has also my thanks for her admirable help.

In conclusion, may I state that this seems to both my colleague and myself a case of more than exceptional interest, owing to the fact that the condition which I have relieved must have existed from birth, and is, so far as we know, the first case recorded; but, if any exactly parallel case has been cited, we will be more than pleased to compare notes. The result has been most gratifying to us, and I must not conclude without thanking Mrs. M., in whose house the patient was a guest during the operation.

AN OBSCURE ABDOMINAL CASE.

By W. N. ROBERTSON, M.B., C.M. Edin.,
IPSWICH, Q.

J. M., age 28, Fitter, lately working as a labourer in railway yards. Married, and has three children.

Family history: Father died at 45, result of injuries to kidneys and liver. Mother died at 64, pneumonia. Rest of family healthy, except one sister, who is living. Previous history: Congestion of lungs when 11 years of age, typhoid when 14.

History of present illness: Patient, who was a powerfully-built, muscular man, came to me a little over six months ago complaining of severe pain in the epigastric region. He believed that he had strained himself lifting a heavy weight. The pain was deep-seated and so severe that he could not maintain the erect posture, and he could not lie comfortably in bed, but used to lie in a semi-prone position on the floor. This subsided with treatment, and he resumed work, but had to give in again in a week, and he has been more or less confined to bed ever since.

I should say previous to this he had suffered from three or four "bilious attacks," accompanied by similar pain.

On examination there was considerable pain and tenderness in the epigastric region, whilst a distinct swelling could be made out in the region of the head of the pancreas. The pain speedily spread to the two sides over the kidneys, and was very severe, and the urine changed markedly in its character. It varied from a smoky tint to a deep brown, with granular looking debris in it. It gave a distinct blue with guaiacum and ozonic ether, but on examination with the microscope there were no blood-cells to be seen, only granular-looking detritus. This varied in quantity from day to day, but there were no symptoms of paroxysmal hæmoglobinuria. The abdomen generally was swollen and tympanitic. The liver was tender, and he complained of the pain being severe in the loins at times and tender on percussion in that region. Motions offensive at first, now fairly natural; temperature rather hectic, never above 101°, usually 99.5 to 100.5°. Used to get rigors and cold sweats at night. Pain continued for nine weeks, when he was seen by Dr. Hopkins, who advised exploration of the region of the cæcum and appendix in the hope of finding pus. This was done extra-peritoneally, the perirenal tissues being also explored, but with a negative result. A drainage tube was left in for a few days, in case any collection of pus should be in the neighbourhood. Strangely enough, the patient improved greatly after this for a time; temperature fell to normal, pain ceased, appetite became excellent, and he got up. The tongue was clean, though slightly glazed. About two months ago, he had a fresh rise in temperature, with fresh pain in epigastric region. Since then, the liver and spleen have gradually enlarged to the extent you see (liver two inches below ribs in nipple line). Though his temperature continues hectic, he eats well; but the sleep function is badly interfered with, and he is steadily wasting.

I should be glad to have the feeling of the meeting as to the diagnosis in this interesting case, and the treatment which you would suggest.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 24th June, at 8.15 p.m.

Business:—General.

GEO. B. REYNOLDS, Hon. Secretary.

HEPATIC ABSCESS.

By W. A. GILES, M.B. ET CH.M. EDIN.,
ADELAIDE.

Two cases of single abscess of the liver have recently come under my notice, the notes of which may be of some interest, especially as the disease, arising spontaneously in Adelaide, is decidedly rare.

CASE No. I.

J. M., *æt.* 65, until about 12 months ago in the police force, always residing in the city. He consulted me first on the 10th March of the present year, and gave the following history:—His health was usually good, and for the last 20 years has been able to follow an active occupation. In December, 1897, felt dyspeptic and out of sorts, but in spite of home remedies his symptoms continued to increase in severity. He lost his appetite, his tongue was very foul, he vomited frequently when he took any food, however simple in character, and was at first constipated. Aperients were used regularly, and towards the end of December, during the great heat wave which passed over the colony, a severe pain commenced to trouble him in the region of the liver. Two or three weeks later profuse diarrhoea, of a very intractable character, set in. In spite of treatment he became steadily worse, the pain was constant and acute, he emaciated rapidly, and grew so weak that he could only with difficulty get about. When I saw him he was very anæmic and slightly jaundiced, his tongue was thickly coated, his temperature was normal, and his pulse slow and readily compressible. His heart and lungs were healthy, but the liver dulness was increased upwards for about an inch in the parasternal and mid-axillary lines. The whole liver area was abnormally tender, and one spot especially in the seventh interspace about the mid-axillary line was actually painful on direct pressure. There was no bulging on the right side, and the lower border of the liver did not project beyond the costal margin. The urine was clear, straw-coloured, water precipitated copiously on standing, no albumen, no sugar.

On the 11th March he went into a private hospital, on the 13th I aspirated in the seventh interspace at the spot where the most painful sensations were elicited, and a syringe-full of chocolate-coloured pus, smelling very offensively, was withdrawn. A few days after this, as soon as his wife's consent could be obtained, I arranged to operate.

Operation: Dr. Poulton kindly assisted me. I removed about two inches of the eighth rib,

a little anterior to the mid-axillary line, and as soon as this was done the pressure from below caused a distinct bulging into the wound. This I freely incised, and evacuated about 40 oz. of chocolate-coloured offensive pus. I passed my finger into a large cavity in the liver; the walls where I could reach were rough and irregular, with numerous tags of necrotic liver tissue projecting; about half an inch or perhaps less of liver had to be passed through before the cavity was reached. The two surfaces of the pleura, the diaphragm, and the adjoining portion of the liver were adherent to one another and the chest wall, so there was no danger of the pleural or peritoneal cavities becoming directly infected by pus from the abscess cavity, and sutures were not necessary. I inserted a large drainage tube about six inches in length and irrigated freely.

The patient made a rapid and uninterrupted recovery. The pain soon disappeared, his tongue quickly cleaned, the diarrhoea ceased, and he is now getting about almost as well as ever. The wound has quite healed, and he is within 3 or 4 lbs. of his usual weight. The temperature never rose above 100deg., and this was only for three days before the operation. There was a free escape of bile for some weeks, but this gradually ceased.

CASE II.

Mrs. B., *æt.* 64, a widow who had always been engaged in house-work and until recently had enjoyed good health, sent for me in the last week of March. She complained of intense pain in the epigastric region, vomiting, and constipation. Her temperature at my first visit was 104deg., and the pulse was very rapid and feeble. She had not been feeling well for about a week before my visit, but the severe pain set in during the night previous to my seeing her. She was distinctly jaundiced, the tongue was thickly coated with a brownish fur, the breath was very offensive, and the skin was perspiring freely. The right side of the heart was dilated, and a loud systolic mitral murmur conducted towards the axilla was distinctly heard. Nothing beyond an occasional rhonchus could be heard in the lungs, no dulness at the bases behind. There was marked enlargement of the left lobe of the liver, and the epigastrium was so tender that only the very gentlest manipulations could be tolerated. The abdomen was not distended, nor was the lower part specially sensitive on palpation. The urine was very scanty and strongly indicated the presence of bile pigment. It contained neither albumin nor sugar.

Progress: Her pain was in a measure relieved by the use of opiates and hot applications. Her bowels were opened with difficulty by large doses of calomel and enemata. The temperature continued high, varying from 101deg. F. to 104deg. F. The icterus did not show any sign of abating; if anything it became more marked, the pain when the sedatives were diminished seemed as severe as ever, and her strength was evidently failing. On the sixth day after first seeing her I obtained consent to aspirate, and immediately obtained pus. With as little delay as possible I arranged for an incision and drainage, as her condition was very critical.

Operation: With Dr. Poulton's kind assistance I made an incision in the epigastric region immediately to the left of the median line. As the liver was adherent to the abdominal parietes I did not hesitate to plunge my knife into that portion of the organ which presented, and pus flowed at once. About 15 oz. were liberated, smelling abominably, and creamy in consistence and colour. A large drainage tube was inserted, the cavity irrigated and dressings applied. When I introduced my finger into the wound the walls were felt to be rough and irregular, and very friable. There was no suggestion of any hydatid.

The discharge subsequently was very copious, bile escaping freely, necessitating frequent dressing. Though the pain was easier after the operation it did not disappear entirely, and the temperature continued over 100deg. F. For a few days she seemed to be gradually improving, and I was hopeful of a successful result, but her strength was insufficient to carry her through the ordeal, and after the fifth day she perceptibly lost ground. The general exhaustion became more and more pronounced till the eighth day after the operation, when she died.

Remarks: I have now operated upon six cases of tropical or single abscess of the liver, and all, with the exception of the last two, could be directly traced to residence in a tropical climate. Both the patients I am now writing about have lived either in or only a few miles out of Adelaide for the last thirty years, and it is a coincidence that these two unusual cases should come under my notice within a fortnight of each other. Can it be that the exceptionally hot summer we have had to endure lately may be held responsible for these purulent collections? Great elevation of temperature is a supposed cause of hepatic abscess, and this is the only explanation I can offer for these examples of the disease. Here

we have two individuals, both advanced in years, of opposite sex, with excellent clinical histories and with constitutions unimpaired by excesses of any kind, suffering from this rare malady towards the termination of a summer of almost unparalleled severity in this country. It certainly does seem to lend colour to the suggestion that great elevation of temperature may with good reason be set down as one of the factors in the production of this disease. I do not know whether any of my professional confrères have had any experiences lately similar to my own, but I shall be glad to hear their views on this subject. I need hardly say that I was on the look out for any evidence of hydatid disease, but there was nothing to suggest a suppurating hydatid in either instance.

Another point I might call attention to is the almost entire absence of any rise of temperature during the course of Case I. One would hardly imagine that such an amount of pus could be present in the liver with such an insignificant elevation of the temperature as I have reported. Dysentery or diarrhoea is usually associated with this disease. In Case I. diarrhoea was a marked symptom during the latter part of his illness, till the pus was liberated; in Case II. the converse held good, constipation of an obstinate character being recorded.

The etiology of hepatic abscess—I refer, of course, to the single variety at present under consideration, not to the purulent collection of pyemic origin—is responsible for many diverse opinions by able observers. One thing is certain, residence in a tropical country is not essential, for we find Fagge has collected ten cases which were treated at Guy's Hospital during a period of twenty years, and it is positively stated that the patients had never been out of England. Similarly many cases are recorded as having occurred in people who have always resided in the southern portion of Australia and in other temperate climates.

We are all well aware of the diverse opinions that have been expressed by competent and experienced authorities on the relations between dysentery and abscess of the liver; some maintaining that the hepatic disturbance is directly produced by morbid products conveyed from dysenteric ulceration of the intestine, others that the liver abscess is the origin of the bowel symptoms so usually associated with the disease. A case has been recently quoted by Surgeon-Major Leahy which appears to prove that in this instance at any rate the hepatic abscess was directly caused by dysentery. His patient had

an attack of dysentery in June which lasted till the latter part of July. Four months later he developed the symptoms and physical signs of an abscess in the right lobe of the liver. The pus obtained was immediately subjected to an examination under the microscope, and the amœba of dysentery was found to be present. But other cases, not in any way associated with dysentery, must have another origin, and a prolonged and intensely hot summer may be one.

A CASE OF SUBPHRENIC ABSCESS.

By R. HUMPHREY MARTEN, M.B., B.C. CAN-
TAB.; M.R.C.S., L.R.C.P. LOND., ADELAIDE.

WHEN reading a paper on a case of successful suture for a ruptured gastric ulcer before this Society last year, I mentioned that occasionally ruptured abdominal viscera gave rise to Intra-peritoneal subphrenic abscesses, instead of acute general peritonitis, and I trust that the notes of the following case may be of interest, more especially as we are dealing this evening with collections of matter in this region. I would like to preface my remarks by saying that I did not diagnose the case as a subphrenic abscess before the operation and its true nature was only revealed after opening the supposed cyst.

I am indebted to Dr. Vernon Shone, of Strathalbyn, for sending Miss B., of Milang, to me on April 24th, 1898, with the following history. She was 37 years of age, and her illness dated from May, 1893, when she had her first attack of right-sided pleurisy. She was ill for one month with sharp stabbing pains, which radiated from the right nipple, round to the angle of the right scapula, made worse by deep inspiration or coughing. She remained well till March, 1896, when she fell and hurt her back, and was laid up in bed during July, August and September, with an attack similar to the one described above.

During April, 1897, she was confined to the house for some time with what Dr. Smeaton, who was acting for Dr. Shone, diagnosed as right-sided "dry pleurisy," and then the side appeared enlarged for the first time. In October, 1897, she had a slight attack of pelvic peritonitis; after this, she felt fairly well, except for aching pains in the loins, which went up to the angle of the right scapula, and she noticed that she became exhausted after the slightest exertion.

About the middle of March of this year she had another attack of right-sided pleurisy with

an aching pain in the right hypochondrium, which passed up to the right shoulder and down the right arm. Since this attack she has been getting noticeably thinner, with occasional night sweats, and swelling in the hepatic region, with shortness of breath, but no recognisable fever. She has never had any other serious illness, and gives no history of attacks of diarrhoea or dysentery, and has never been out of South Australia. She felt the heat of the past summer very keenly. Her family history is good, except that two of her sisters died of phthisis. Her present state showed that she was an emaciated, dark-complexioned woman, complaining of pain and swelling in the hepatic region. She had a clean tongue, normal temperature, pulse 100, small and compressible. Respirations 24 to the minute, with breathing entirely upper thoracic.

The right hypochondriac and corresponding epigastric regions were bulging, with a distinctly fluctuating oval-shaped tender swelling between the right rib cartilages and the middle line.

The apparent liver dulness commenced at the fourth rib cartilage at the sternum, the fifth rib in the right mammary line, and extended upwards behind to nearly the angle of the right scapula, and downwards to two fingers breadth below the costal margin. This dull area was everywhere tender to the touch. There was no hyper-resonance above this line, and no adventitious sounds were audible in the lungs. The heart's apex beat was in the fourth intercostal space, inside the left nipple line. The other organs were apparently healthy, there was no sign of jaundice and the urine was normal.

Having explained to the patient that she probably had a hydatid of the liver requiring immediate operation she willingly gave her consent, providing it was done at her sister's house at Hindmarsh. Therefore, on the morning of April 25th, Dr. Cavenagh-Mainwaring having administered ether, and Dr. Swift kindly assisting me, after the usual preliminaries for rendering the skin aseptic, an incision was made over the prominence in the epigastric region in the right linea semilunaris and after deepening this, an abscess cavity was entered without apparently going through any peritoneum, and about two pints of non-smelling laudable pus escaped, and the finger entered a smooth-walled cavity, with a dome-shaped roof, a concave left wall, which did not apparently extend beyond the left edge of the incision and a convex lower surface; neither the right wall nor the posterior surface could be reached by the finger, but a long probe impinged on the rib behind. No counter opening was made here as

it was considered that, with such firm adhesions, the left lateral or prone positions could be easily adopted and would give sufficient drainage. The cavity was well washed out with sterilized water and two rubber tubes inserted, and iodoform gauze and absorbent wool dressings applied. The breathing improved at once and the patient has made most rapid progress towards convalescence, the drainage being perfect when lying on the left side. Her temperature has always been normal, she is quite free from pain and has a good appetite, and is gaining flesh and strength every day, and will shortly be able to return to her home in the country. Unfortunately we had no means of collecting any of the pus for microscopic examination, but it contained no naked eye evidences of hydatid.

There can be no doubt after considering the physical signs and the conditions discovered at the operation, that we had to deal with a subphrenic abscess, the roof of which was formed by the concavity of the diaphragm, the floor by the upper surface of the liver, and the left wall by the falciform ligament of the liver, and I think anyone, who has practised in Australia, and has had much to do with hydatid disease will forgive me for diagnosing this as a hydatid of the liver, especially when it is remembered that there never was any rise of temperature, except when the attacks of pleurisy were present.

By *subphrenic abscess* is understood a collection of pus in the hollow of the diaphragm, it may be either on the right or left side of the falciform ligament of the liver.

They are in their mode of origin, either primarily or secondarily, *intra* or *extra*-peritoneal. The *primarily intra*-peritoneal are almost entirely due to perforation of some hollow viscus into the peritoneal cavity, more especially the stomach, duodenum, transverse colon, and occasionally the liver and spleen, the escaped contents being shut off by adhesions from the general peritoneal cavity, find their way up between the liver and the diaphragm, or into the lesser omental cavity (when they become sub-hepatic rather than subphrenic) depending on whether the anterior or posterior wall of the stomach gives way. As to whether the abscess will be on the right or left of the falciform ligament, depends on which portion of the stomach perforates, but the great majority are on the left side. These *intra*-peritoneal subphrenic abscesses, due to rupture of a hollow viscus, always contain pus and gas, and have been termed by Leyden *pyo-pneumo-thorax subphrenicus*. This variety, containing

pus and gas, is always of an acute nature, and if not relieved by operation, soon brings about a fatal termination.

The *primarily extra*-peritoneal which do not contain gas originate from abscess or suppurating hydatid of the posterior surface of the liver, from peri-nephritic abscess, from diseased vertebræ or ribs, from suppuration around the female generative organs, from an abscess in the neighbourhood of the cæcum burrowing up behind the peritoneum, or lastly, from a localized empyema perforating the diaphragm, but this is a most unusual accident to occur. Those *extra*-peritoneal which contain gas are due to rupture of the second and third portions of the duodenum, where it is free from peritoneum.

A primarily *intra*-peritoneal may become *extra*-peritoneal and *vice versa*.

These abscesses are extremely difficult to diagnose, more especially the *extra*-peritoneal, for one thing they are very rare, and you have to make out whether they are supra or subphrenic, you must depend, to a great extent, on the history of the case, and the nature of the attack.

The only two I have seen besides this one I did not diagnose correctly, one an *intra*-peritoneal Dr. Verco saw with me, it occurred in a man upon whom I did a Loretta for pyloric stenosis following a gastric ulcer, and two years after the operation a fresh ulcer must have formed and perforated, giving rise to an abscess which had all the clinical and physical signs of a gas-containing subphrenic abscess, but which neither of us at that time understood.

The other case was an *extra*-peritoneal in a young boy, following an acute inflammation in the region of the cæcum. I opened and drained in the right eighth axillary space without going through any recognizable pleural cavity, an abscess with pus of a distinctly fecal smell, but was unaware at the time that these abscesses got up so high. The boy made a good recovery, but died a few months afterwards away in the country from an acute suppurative peritonitis, which evidently originated from a second attack of appendicitis.

From the above it is pretty evident that the case of Miss B. was primarily an *extra*-peritoneal subphrenic abscess, not due to a perforation of a hollow viscus, and as it contained inodorous pus and no gas it was not a so-called *pyo-pneumo-thorax subphrenicus* of Leyden. It probably became *intra*-peritoneal some time before I opened it, the position of the falciform ligament points very strongly to this having occurred.

The causation might be either (1) an abscess on the posterior surface of the liver rupturing and becoming subphrenic; (2) a suppurating hydatid in the same situation; (3) an abscess following the pelvic inflammation; (4) an empyema following the last attack of diaphragmatic pleurisy, which could not, owing to adhesions from the former attacks of pleurisy rupture by the usual course into the lungs, but perforated the diaphragm and gave rise to a subphrenic abscess. I think, myself, that the last is the true explanation, although the least common. The literature of these abscesses is confined to the last three or four years. Greig Smith's 1896 Edition of *Abdominal Surgery* contains the best description. Sydney Martin, in his work on *Diseases of the Stomach*, 1895 Edition, has a good article on the intra-peritoneal variety. In Allbutt's *System of Medicine*, Dr. Lee Dickinson writes on "Subphrenic Abscess," from a medical point of view, and Fowler and Godlee, in their recent work on "*Diseases of the Lungs*," describe the mode of origin and treatment of what they call sub-diaphragmatic abscesses.

NOTES ON A CASE OF QUIET PLEURISY WITH EFFUSION.

By A. B. CARVOSSO, M.B., C.M. EDIN., BRISBANE.

THE patient, a woman aged 34, living in a suburb of Ipswich, Queensland, is married, with six children. There was no tubercular history, either personal or family. She had suffered from winter cough every year for several years past, which usually lasted four or five months. She had never suffered from rheumatism or pneumonia, and she had not had pleurisy till this attack. About the middle of March, 1896, she first began to be troubled with slight pains in the lower part of the left side of the chest, laterally and anteriorly, also some shortness of breath. Very shortly after, the left side of the chest was felt to be swelling, and a feeling of discomfort in that side increased, dyspnoea being the chief symptom. On examination on April 13th, 1896, I found dulness on percussion throughout the left side of the chest, even above the clavicle, and very feeble respiratory sounds on auscultation, with other physical signs of pleuritic effusion. I aspirated on April 14th, and drew off three ounces of clear serous fluid. The aspirator was defective, and I postponed further proceedings till April 16th, when, assisted by Dr. Robertson, I drew off twenty ounces. Subsequent aspirations were made as follows:—April 19th, 63 ounces clear

fluid; May 1st, 40 ounces clear fluid; May 8th, 64 ounces clear fluid; May 18th, 36 ounces blood-stained fluid; May 23rd, 68 ounces clear fluid; June 1st, 65 ounces clear fluid; June 9th, 56 ounces clear fluid; June 16th, 6 ounces clear fluid; June 19th, 66 ounces clear fluid.

The chest afterwards half-filled in four days, and then the fluid remained practically stationary in amount for three weeks, the patient going about the house and doing some of her housework.

I aspirated again on July 15, drawing off thirty ounces clear fluid. The patient had been kept in bed from the date of the first operation till June 27, when she was allowed to move about quietly. After the last tapping, on July 15th, I saw the patient for a period of two weeks. A small amount of fluid had collected in that time, probably three or four ounces, but as it had accumulated very slowly, and there seemed no increase during the last week I was visiting her, I decided to refrain from further operation. In the intervals between the tapplings I had tried various drugs with the object of diminishing the rate of accumulation of the fluid—digitalis, iron and quinine, salicylate, diuretin, and other diuretics and diaphoretics. The dry treatment was also tried, as little fluid as possible being given, also strapping the affected side after aspiration, but nothing seemed to have much effect upon the rate of accumulation of the fluid. One hopeful feature in her case was the fact that the appetite throughout kept good, and she was of a cheerful disposition; her spirits were not depressed in spite of the repeated operations, and the apparent hopelessness of ever getting rid of the complaint. I left the district two weeks after the last time of operating, the chest at that time, as I have stated, containing three or four ounces of fluid. I did not hear from my patient till April 28th of this year, when she wrote telling me that her health continued to improve after the last tapping, and her chest gave her no further trouble. She increased in weight, and she has for the last eighteen months been in good health and able to do all her own housework. She gave birth also to a healthy female infant in October, 1897. The only occasion on which she has required medical attendance was two months ago, when Dr. Robertson attended her for dengue fever. At that time she felt slight pain in the left side of the chest, and Dr. Robertson states that he found some slight dulness at the base of the left lung, which he considers was due to a thickened pleura.

Such cases are, I believe, rarely met with. The total amount of fluid removed from the pleural cavity was 517 ounces, with twelve tapplings, extending over a period of three months.

S. West publishes a case (*British Medical Journal*, 1895, Vol. I. p. 913 and 926) of a lady aged 31, suffering from tuberculous ascites and pleuritic effusion. Two gallons of serous fluid were removed from the abdomen, which never refilled, and later 83 pints 6 ounces of fluid were removed from the right pleural cavity in thirty-seven tapplings extending over a period of eleven months. Finally a free incision was made and resection of the seventh rib in the posterior axillary line, when a pint of clear fluid escaped, and the lung collapsed entirely, being nowhere adherent. The discharge gradually became purulent and the patient's condition became most critical, though she finally recovered after three or four months serious illness.

Another case is mentioned by F. de Havilland Hall, of a syphilitic patient whose chest was tapped seventeen times, 700 ounces of fluid in all being removed.

Mr. B. Baskett also reports a case of a middle-aged man whose chest was tapped seven times, from two to six pints of fluid being removed at each operation, but as the patient was going down hill a drainage tube was inserted. The fluid after three weeks became purulent, though in four months' time the cavity was closed and the man restored to health.

NEW SOUTH WALES MEDICAL BENEVOLENT FUND.

THE following subscriptions have been received since the last notice :—

1.—Subscribers of £1, being the amount due for four years : Drs. W. J. Barkas, Bassett, Dagmar Berne, P. D. Bray, T. W. Burgess, H. G. Button, F. G. Connor, E. E. Griffiths, A. J. Harwood, W. Hull, T. W. Lee, J. B. Moore, P. Muskett, M. A. B. McCarthy, J. McLeod, R. D. McMaster, A. Pentland, T. Pickburn, R. Read, O. H. Reddall, Sir A. Roberts, Drs. W. Spencer, F. C. Stevenson, J. A. Thompson, C. R. Watson.

2.—Subscribers for one year : Drs. E. H. Binney, C. C. Cocks, B. Dick, J. English, H. L. Harris, L. Hickey, H. E. Lee, E. S. Littlejohn, J. Marshall, A. H. Meeke, W. Nickson, D. Parry, C. H. Scott, F. C. S. Shaw, P. T. Thane.

Those who have not yet subscribed, and are willing to do so, may send their donations to F. W. Hall, M.D., hon. sec., 18 College-street, Sydney.

The *New British Pharmacopœia* will arrive early in July. Orders are now being booked by L. Bruck, medical bookseller, Sydney.

NOTES OF A CASE OF PUERPERAL INFECTION TREATED BY ANTI-STREPTOCOCCUS SERUM.

BY GEORGE CUSCADEN, L.R.C.P., L.R.C.S. ED.,
HON. SURGEON WOMENS' HOSPITAL, MELBOURNE

MRS. M., *æt.* 27, multipara, delivered by the aid of forceps of a healthy male child, on Friday, 18th February, 1898. Placenta and membranes complete. The patient progressed favourably until the ninth day after delivery, when she was seized with shivering fits, followed by abdominal pains and tenderness. Temperature, 103.6°; pulse, 115; tongue coated and dry; respirations rapid; great thirst. Ordered her a mixture of quinine and digitalis; gave her an intra uterine douche. Visited her again the following morning. She complained of having had a very bad night, owing to the severity of abdominal pains. Temperature 102.4°, pulse 110, tongue brown and dry, no appetite. Very thirsty, abdomen distended and tender, lochial discharge diminished in quantity. Curetted the uterus, with negative results, the usual debris only being found. On examination with fingers, uterus found perfectly clean. 28th February: Temperature 103°, pulse 125. During the night she had several rigors, lasting from 10 to 15 minutes, intense abdominal pains, and great distention of the abdomen. Face pinched and drawn, eyes sunken, tongue red, dry and tremulous, great thirst. Diarrhœa with occasional vomiting, lochial discharge greatly diminished. 1st March: Temperature 102.6°, pulse 120, great pain and tenderness of the abdomen, increased by pressure. Had rather a bad attack of hiccough during the night. As there was no improvement in her condition as the result of curetting and intra-uterine douches, I decided to try the effects of antistreptococcus serum in her case. I accordingly obtained from Messrs. Francis & Co. a tube containing 2½ drachms (10 c.c.) prepared by Merreux and Cane, according to the method of Marmorek, and injected it. One hour after injection the temperature fell to 97°.

Saw her again the following morning, when she informed me she had a splendid night's sleep. Tongue moist, no abdominal pains, very little distension. Said she felt quite well. Temperature 100°, pulse 98. I decided to again inject a similar quantity of the serum, which acted as before, temperature again fell to 97°. 3rd March: Temperature and pulse normal, and remained so from that time forward. She had an uninterrupted recovery. On looking up the literature on the subject I find in the *American*

Year-Book of Treatment two cases treated by (Goulard) this method, one died, the other recovered. Marmorek, Vincey, McFarlane, and Kennedy report successful results from this treatment.

THE DIAGNOSTIC SIGNS OF TYPHOID FEVER.

By A. V. M. ANDERSON, M.D. ET B.S.,
PRAHRAN, MELBOURNE.

It is not my intention in these brief notes to enter at length into the diagnosis of typhoid fever from the other diseases with which it may be confounded, but rather to mention a few general facts and conclusions which I have arrived at from my experience of the disease. Nowadays one of the most important diagnostic methods is that of the Widal serum test, but as that is to be treated of in detail by Dr. Springthorpe, I shall confine myself almost entirely to clinical methods.

Difficulties in the diagnosis of typhoid are met with mainly at two periods. First, in the early stage of the disease—till about the end of the first week—when the symptoms are mainly those of general febrile illness, and in which the characteristic signs and symptoms are not yet present; and secondly, when the patient is seen only very late on in the illness, at a time when complications may have arisen to obscure the original disease, and when, as is often the case, no accurate history of the illness can be got.

It is seldom that we have an opportunity of seeing the patient in the first week of the disease, and if we do we are usually unable to be quite certain as to our diagnosis. In such cases it is of great importance to make a thorough examination of the organs of the body, so as to eliminate, if possible, all other diseases, such as pneumonia (the physical signs of which may remain latent for some days), tubercular disease, &c. We should also enquire into the previous history of the patient, which may point to a former endocarditis or ear disease, &c. It is very necessary to remember that typhoid may occur in conjunction with these as with many other diseases. At this period the provisional diagnosis of typhoid is founded rather on the absence of the signs of any other disease than upon any positive evidence of typhoid. Still there are certain diagnostic signs which are of value, and one of these is the temperature curve. Wunderlich's rules—that we can exclude typhoid if the temperature reaches 104° by the second day, or

if it does not rise to 103.1° by the sixth day—in many cases hold good, but they are subject to exceptions. In this country we see frequently cases of mild typhoid in which the temperature does not rise to 103° at any period of the illness, and yet characteristic symptoms are present. In some of these, resolution, instead of sloughing, appears to take place in the Peyer's patches and solitary glands, and the temperature quickly falls to normal. Any indiscretion in dietetic or other treatment may give rise at once to a relapse of a severe type.

Epistaxis is another symptom of frequent occurrence at an early stage of the disease, and is of considerable diagnostic significance. In the last 300 cases of which I have notes it was present in 58, or nearly 20 per cent., and in 47 of these it had occurred before the patient came under observation, in many cases during the first three or four days.

The age of the patient and the season of the year are of importance, but it must be remembered that we cannot exclude typhoid because of the extreme youth or advanced age of the patient. Cases occur in children during the first two years of life, and in patients of advanced years. I have seen cases in patients of 56 (confirmed by *post-mortem* examination) and 64, and one that was almost certainly typhoid in a man of 80. Although commonest in summer and autumn, the disease may occur at any time of the year.

Diarrhoea is comparatively infrequent here—at least of late years—not more than 25 per cent. of cases suffering from it. When present, however, it usually is so during the very early stage of the disease. Many patients who were constipated during their stay in hospital stated that diarrhoea was present before admission.

Other symptoms of importance during the early stage are the presence of severe and continuous headache, loss of appetite, which is almost invariable, the peculiar condition of the tongue—becoming more and more coated in the centre, but remaining red at the tip and edges—and the gradually-increasing lassitude and disinclination for exertion.

After the end of the first week it is only in a small proportion of cases that there is any difficulty in diagnosis, sometimes because of the mildness of the attack, sometimes because of the obscuration of the features of the original disease by complications, and the difficulty—noticed especially in hospital patients—of obtaining an accurate history of the symptoms preceding admission. At this stage, I think, the most useful diagnostic features are the character of the motions, the presence of the

roseolar rash, and the enlargement of the spleen.

There is a certain proportion of cases—chiefly, in my experience, relapses—in which there appears to be a mixed infection; and in such cases, although the ordinary symptoms of typhoid are present, the motions are of a dark colour. With the exception of these cases, and such as have the motions discoloured by blood or medicines, the light colour is almost always noticed. In the absence of the sloughs peculiar to typhoid, and with a dark colour of the *feces*, I have several times questioned the diagnosis of typhoid, which seemed from other symptoms probable, and usually the after history of the case proved it to be not typhoid.

Splenic enlargement is very frequently found in typhoid fever. I have found it in 260 out of 300 cases. As a rule, the edge of the enlarged spleen can be felt distinctly below the edge of the left lower ribs, especially if the patient lies on the right side and takes a long breath. In many cases it is impossible to feel the splenic edge because of the abdominal distension, but it is very common then to be able to make out a considerable increase of splenic dulness on percussion. The enlargement is, of course, by no means peculiar to typhoid. It may be found in ulcerative endocarditis, tuberculosis, influenza, &c.; but it is so frequently found in typhoid, and to such an extent, as to make it a valuable diagnostic sign. Splenic enlargement is often found before the end of the first week, though frequently not for some days later. I have noticed the spleen below the ribs on the fourth day of a relapse. Usually the swelling of the spleen diminishes with the fall in temperature, but it not uncommonly persists for some time after the temperature has fallen to normal.

Pain or tenderness, or both combined, in the splenic region are not infrequent. I have found one or other in nearly 13 per cent. of cases (38 in 300).

The roseola of typhoid is one of the most reliable of symptoms. Liebermeister states that it is hardly ever absent throughout the course of the disease; but most writers do not regard it as so invariably present.

Dr. Dreschfeld, in "Allbutt's System of Medicine," says that spots are present in 77 per cent. of cases. I have noted their presence in 586 out of 915 cases, or nearly 65 per cent., and the proportion should probably be larger. They may be present in a relapse when they have not been noticed in a first attack, and not uncommonly appear earlier in a relapse than

in the primary illness. A mustard plaster or a foment on the abdomen may develop spots when they were not previously noticeable.

The diagnostic value of gurgling in the right iliac fossa is more than counterbalanced by its danger.

Herpes labialis is a symptom that is supposed to negative or render improbable the diagnosis of typhoid. Liebermeister records that at Basle it was noticed in 56 out of 1,420 cases, that is, about four per cent. I have notes of it in about two per cent. of cases, and in only one case was pneumonia present.

Anyone who has seen numerous cases of typhoid cannot help noticing an odour peculiar to that disease. It can hardly be described, but it is very suggestive of the disease to one who is acquainted with it.

At a late stage of the disease the diagnostic danger is that we may overlook typhoid in the presence of some complication which may be taken for the primary disease, such, for example, as appendicitis, pneumonia, peritonitis, etc. Here, a careful history of the illness may be of service, and the presence of some of the characteristic signs of typhoid; but still cases are occasionally seen in which the diagnosis is made for the first time *post-mortem*, the typhoid lesion being visible at times as healing ulcers, so that diagnosis *ante-mortem* would have been very difficult. It is in these cases that an accurate history of the illness and a careful examination of the patient are of great service in diagnosis. Since the discovery of the bacillus typhosus, the nature of the secondary lesions have been proved in many cases by the detection of the micro-organism; and, more recently, our diagnostic resources have been added to by the Widal's serum diagnosis, the value of which is generally admitted, although opinions differ as to the accuracy of its results in all cases. In six doubtful cases of mine that it has been tried in this year, four positive and two negative reactions were obtained, and in each case the progress of the case subsequently confirmed the results of the serum test.

PROTARGOL.—We have received from Mr. G. Arnold a specimen of this new silver preparation (see advertising: columns, page xxvi.), which is strongly recommended for the treatment of gonorrhoea, and as an antiseptic wound healer. It is a smooth, yellowish powder, readily soluble in warm or cold water, and is not precipitated by either albumen or chloride of sodium. For injections it is used at first in $\frac{1}{4}$ per cent. solution, gradually increasing to 1 per cent., and can be retained in the urethra for as long as half-an-hour.

NOTES ON A CASE OF AORTIC DISEASE WITH EMBOLISM.

By J. MORISON GARDINER, M.B., CH.B.

READ BEFORE BALLARAT DISTRICT MEDICAL SOCIETY, APRIL 28, 1898.

S. R., 47 years, admitted 7th March, 1898. Has been a coal-lumper on the wharves. Patient came to out-patient room and there complained of a great deal of pain in abdomen, with fullness of abdomen and shortness of breath. Patient was only on a visit to Ballarat, having been recommended by a Melbourne medical man to go to the country for a change. Previously, he had been an inmate of the Melbourne Hospital, and, seemingly, had then had dropsy; was then treated out in one of the suburbs (this only obtained after death from friends). This illness began about fourteen days before admission, with pains in abdomen and swollen feet, but now the swelling had gone down. Has distension of the abdomen and a lump behind the umbilicus. Patient is of a dirty-pale appearance (almost kidney), temperature 97.6°, has a good appetite, bowels only fairly well open, slept well, tongue clean. Never any history of rheumatism.

On examination, *pulse* registered 95, inclined to be jerky. *Heart*, apex down and out, mitral systolic bruit, other sounds clear. *Chest*, *lungs* normal. *Abdomen*, distended, gaseous; liver dulness is increased, especially downwards, and lower border can be felt two inches below edge of cartilages of ribs on right side. Behind the umbilicus a mass can be just felt like a faecal mass.

Patient put on Mag. Sulph. Acid mixture.

8th March.—Abdominal distension has increased, very tense and tender. Occasionally the pains come on over the abdomen, and are very severe while they last; but patient is easier than when admitted. No diarrhoea, rather difficult to get bowels open. Has had rectal tube and turpentine stupes. Tumour not now felt because of increased distension.

10th March.—Vomiting has started, and pain becomes severe. Appetite bad now, has only slept fairly. No headache, no giddiness.

12th March.—Patient is bad, distension and pain are great, has rectal prolapse; stools frequent, and diarrhoea now, but quite clay-coloured. Pain over abdomen now and again. Temperature subnormal. Bowel examined—prolapsed, nothing felt per rectum. Query slight jaundice. Urine very high-coloured. Enema; *Asafetida* gave relief. Has some moist sounds at bases of lungs. Pulse rapid, weak. On Soda Sulph. Bicarb. and Salicyl.

Died 13th March, 1898.

Autopsy, March 13.—Patient strongly made, well-nourished in appearance, abdomen full. On opening abdomen, dark fluid blood ran out in large quantity, about one and a half pints or more. Bowel distended with gas. Behind bowel a tumour could be felt, and on turning bowel over clots were seen and bowel adherent in parts by fresh adhesions of lymph. Swelling was in the mesentery, and of size of duck's egg. A rupture of the peritoneal coat could then be seen from the mesentery. On dissecting this out, no communication was found directly with the large abdominal vessels, but seemed to be in the smaller mesenteric vessels (superior). Large clots were turned out in layers, but recent. Specimen shown. *Spleen* had several large white cortical patches—query old infarcts. *Bowel*, mucous membrane, was congested and reddened in patches corresponding to upper portions of smaller intestines, i.e., jejunum. *Heart*, large; *left ventricle*, hypertrophied greatly, aortic valves had very large vegetations, especially on one valve, recent clots hanging to them; *mitral*, one valve very much thickened. *Liver*, fatty and very large, lower border coming down two to three inches below edges of cartilages of ribs. *Lungs*, hypostatic congestion at both bases. Right side of heart full of blood.

Specimens exhibited of aortic valves, spleen, mesentery, and bowel.

DEATH FROM POISONING BY BITTER ALMONDS.

By HERBERT HORROCKS, M.D., B.Sc. LOND.,
HONORARY ASSISTANT PATHOLOGIST AND
BACTERIOLOGIST, PUBLIC HOSPITAL, PERTH,
W.A.

THE comparative rarity of a death resulting in an adult from the ingestion of the seeds of bitter almonds makes the following case deserving of publication.

A. H., aged 34 years, a gardener, was found dead on the morning of April 22, 1898, lying dressed upon his bed. At the coroner's inquest, the following material but insufficient facts were elicited from his friends. He lived a comparatively lonely and isolated life; he was always in good health, though he often complained of "his head and stomach," yet would never consult a doctor but preferred to treat himself by means of drugs and vegetables. At the *post-mortem* examination conducted by myself about thirty-six hours after death, the following were the more important observations made as to the condition of his internal organs:—

Rigor Mortis still present in the upper and lower limbs (an unusual length of time in this climate).

Brain showed excess of blood-points, but no excess of serum.

Heart.—Ventricles contracted, auricles full of fluid blood.

Lungs.—Engorged; œdematous throughout. There were also universal recent pleural adhesions over the right lung, and slight emphysema of both lungs.

On opening the stomach, it was found to contain a moderately large, partially digested meal, consisting chiefly of vegetables and rice. A smell of alcohol was present, but no odour of a volatile poison was discernible.

The mucous membrane of pharynx, œsophagus, and stomach showed no signs of inflammation, irritation or corrosion. All the other organs were normal, with the exception of a slightly granular condition of both kidneys.

Not feeling satisfied as to the cause of sudden death, and suspecting the existence of some alkaloidal poison, I sent the following portions to the Government Analyst for examination:—1, stomach; 2, contents of stomach; 3, urine; 4, serum of brain. The following is his (Mr. E. A. Mann's) interesting report:—

The stomach and contents were found by him to contain a considerable amount of crushed almonds, and evolved a smell of prussic acid, very faint at first, but developing strongly in twenty-four hours. The contents of the stomach were also strongly alcoholic. The prussic acid vapour was recognised by the sulphur and iron tests, and was separated and estimated by distillation into potash, and titration with silver nitrate solution. One and a half grains of anhydrous prussic acid were obtained from the contents of the stomach. Portions of the almonds from the stomach were washed and digested with water, then distilled with dilute sulphuric acid to endeavour to definitely determine whether they were the bitter variety, but no further prussic acid could be obtained from them.

At the inquest, the Government Analyst expressed his opinion that a strong presumption existed that the prussic acid was derived from the almonds. Other evidence showed that almond shells were found in the room where deceased died, and also one almond, which a witness ate and found very bitter.

The verdict of the jury was that "death resulted from poisoning by prussic acid derived from bitter almonds eaten by the deceased."

CLINICAL NOTES.

A FURTHER NOTE ON INFANTILE SCURVY.

By ANGEL MONEY, M.D., F.R.C.P., LOND.,
SYDNEY.

A RECENT experience demonstrates the necessity for calling further attention to this disease. A female child, aged eight months, was brought to me for paralysis of both lower limbs, attended with great screaming every time these limbs were touched. The symptoms had lasted four weeks, and were easily removed by orange juice in less than ten days. The interest of the case lies in the fact that a children's specialist had twice seen the case without diagnosing it, and had suggested putting the child under anaesthesia in order to discover the nature of the complaint. The infant had been fed on nothing else than a well-known infants' food from birth.

A CASE OF INFANTILE SCURVY.

By W. H. CRAIG, M.B.C.S., L.R.C.P. LOND.,
SYDNEY.

A few months ago a female child, aged 14 months, was brought to me because "she cried every time she was touched" and "did not move her legs." She had been bad for several weeks. The two legs appeared equally painful. She had one or two bruised-looking spots on each knee and one on the back. Had four teeth in the upper and two in the lower jaw. Gums not swollen, but there was a very marked purplish red discolouration of the mucous membrane of the gums opposite the teeth—rather more marked in the upper jaw. Ribs beaded. Child has been fed on one of the well-known infants' foods, prepared with *boiled* cows' milk. The medical man who had seen her, and with whose sanction she was brought to me, had excluded scurvy, owing to the fact that she had been taking fresh cow's milk. The child improved so rapidly on orange juice, raw beef juice, and the same infants' food as before, only prepared with *unboiled* milk, that she was able to stand in two or three days. What is the "something" wanting from infants' foods, and that is apparently destroyed by the *boiling* of cows' milk, that allows of the development of scurvy in otherwise healthy children?

PAYMENT AT HOSPITALS.

A CORRESPONDENT writes: "I attended a bad case of puerperal eclampsia acute uræmic poisoning. The patient recovered, and her father paid me some of his account. Some time afterwards I request payment of the remainder, and am informed that he is very sorry he can't pay yet (as he is a poor man) in consequence of having two other children in hospital for whom he is paying seven and sixpence a week each. Now why should the hospital have priority in payments?"

MESSRS. ANGUS & ROBERTSON inform us that the new edition of the "British Pharmacopœia" will arrive by the R.M.S. Ormuz, which is due in Sydney about the 25th inst. This firm is also booking orders for the new editions of "Squire's Companion to the B.P." (1898), and "Martindale & Westcott's Extra-Pharmacopœia," shortly to arrive.

PROCEEDINGS OF BRANCHES.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting was held in the rooms, Collins-street, on Wednesday, May 25th, at 8 p.m. Present: The President, Dr. McAdam (in the chair), and Drs. Hutton, Strong, Springthorpe, Kent-Hughes, Kenny, O'Sullivan, Syme, Nihill, Meyer, Cuscaden, Lillian Alexander, McGee, Helen Sexton, Loughnan, Hamilton, Gertrude Halley, Janet Greig, Henry, Martell, J. R. M. Thomson, Rothwell Adam, A. V. Anderson, J. K. Scott, Black, Merrillees, and Morrison.

The minutes of the previous meeting were confirmed.

The PRESIDENT congratulated the Branch on the incorporation of the Ballarat Medical Society as the first District Branch of the Branch in Victoria.

The following new members were declared elected:—R. H. Strong, M.B. Melb., M.R.C.S. Eng.; J. H. McGee, M.D. Ireland, D.P.H. Cantab.; G. Rothwell Adam, M.B. Edin.; E. J. Keogh, M.B., Ch.M. Ed.; G. Loughnan, M.B. Melb.

Dr. HUTTON gave notice of motion that at the next meeting he would move that smoking be again permitted at ordinary meetings.

EXHIBITS.

Mr. SYME exhibited a case of facial hypertrophy due to some obscure pressure cause. It was suggested to further examine the case, and report later on.

Dr. SPRINGTHORPE exhibited a remarkable typhoid chart, in which the temperature had 4 times risen from normal or sub-normal to 105° and over, falling again within a few hours, without any signs of local or general distress, and due, apparently, to the interrupted passage of two almond stones along the intestine. (They had been ingested some six weeks previously, and the bowels opened daily during a moderately severe attack.) As contrast, a chart was shown wherein a large number of fair-sized sloughs were passed for days when the temperature reached normal, without any rise of temperature.

RESUMED DISCUSSION ON APPENDICITIS.

Dr. O'SULLIVAN, as a gynaecologist, remarked on the great frequency with which changes were seen in the appendix on operation where there had been no previous symptoms of disease. Though vestigial, the appendix was in other respects on a par with the bile and bladder ducts. He emphasized the parallelism in structure, and liability to disease. The etiology of appendicitis had much in common with disease of these ducts—pressure, obliteration of the eumen, chronic dyspeptic derangement with mucous thickening, catarrhal conditions, retention of contents, microbic absorption, and increased virulence of the colon bacillus, with subsequent ulceration, abscess, &c. The old view of foreign bodies, stercoral concretions, was no longer tenable—generally they were secondary. As regards treatment, there was practical unanimity amongst the best authorities. With Mr. Syme, he said—operate where there is sudden severe onset, high temperature, frequent pulse, tympany, vomiting, signs of pus localized or diffused—and where there is a relapse. The critical time was from the third to the seventh day—it was then "too late for early operation, too early for late operation." Without dogmatizing a capable surgeon should be able to settle the question, and, with White, his rule was then to incise and drain. As a gynaecologist, he found lesion of the appendix fre-

quently associated with disease of the appendages. Such were nearly always secondary to the tubal disease.

Dr. ROTHWELL ADAM considered that there was a general agreement as regards treatment, but that our views on etiology and pathology were still incomplete. As regards pathology, most would agree with Dr. O'Sullivan. As a gynaecologist, he frequently found sudden pain, with more or less peritonitis, and the question was—Appendicitis or some gynaecological condition? He quoted a case in which appendicitis was complicated with a thickened tube and cystic ovary; another where it was a question of doubtful tubal pregnancy; and a third of doubtful sepsis after delivery, but really appendicitis with stercoral concretion. As regards prognosis, one had to differentiate between ordinary forms and tubercular. In one case he had found persistence of symptoms to depend upon abdominal tubercle, of which there might be no positive evidence.

Dr. SPRINGTHORPE showed the chart of a case of abdominal pain, slight vomiting, a single shiver, temperature 104°, normal in a fortnight, treated as inflammation of the bowels, then sent into hospital with pyrexia, curds in stools, very marked retention, and doubtful typhoid fever; but no headache, no enlargement of spleen, no spots, no epistaxis, and no general typhoid symptoms. Examination disclosed a painful swelling in the region of the appendix,—the blood twice tested gave no Widal reaction,—and Dr. Stirling cutting down, evacuated a localized abscess in connection with the appendix, that apparently would have soon burst into the bowel or peritoneum.

Dr. MEYER had been struck with the frequency with which appendicitis had evidently not been primary, as was generally supposed, but secondary to disease of the appendages. He quoted a case in which the abscess has been secondary to tubo-ovarian trouble of gonorrhoeal origin.

Dr. NIHILL considered that the great point was to recognise that cases were generally surgical, and believed in calling in a surgeon in all suspected cases. Perhaps the main difficulty was where the temperature was sub-normal.

The PRESIDENT, in calling upon Dr. Henry and Mr. Syme to reply, congratulated them upon the ability with which they had introduced the subject, and the Branch upon a discussion that would have done credit to any medical gathering in any part of the world.

In reply, Dr. HENRY expressed his pleasure that such a valuable discussion had taken place. He would suggest that a similar debatable subject be taken every three months, and confined to a single evening.

Mr. SYME, in responding, thanked members for their kindly remarks. He would add a little on the fresh aspects of etiology and pathology. As regards the former, he agreed with Dr. O'Sullivan, and had expressed his opinions last year in a paper on "Inflammation of the Liver and Gall Ducts." The conditions were very similar—the liability to concretions and inflammatory lesions were present in bile ducts, kidney, and appendix. In the appendix the liability to microbic infection was most marked, in the kidney least, whilst in the bile ducts the bile was antiseptic, and the colon bacillus not so adjacent. Any natural or pathological foreign body became a source of irritation, interfered with function, lessened the resisting power to infection, and opened the way to the colon bacillus, with all its pathogenic developments. The concretion was secondary to the condition of the appendix, not the cause of it, and, indeed, was often absent. Thus, with Dr. O'Sullivan, he believed the correct explanation to be some occlusion, retention of products,

entrance of the colon bacillus, &c., chemical changes in secretion, increased virulence in the germs with irritant products, their gradual formation of concretions, possibly the obliterating appendicitis of Senn, the milder catarrhal attacks, or the virulent fulminating cases, according to circumstances. Where concretions formed, the circle might be reversed, and the fresh irritation promote fresh infection. Pathological conditions of the appendages might also, as the gynaecologist said, bring about secondary occlusion in the appendix. The dyspeptic troubles so frequently found lead up to attacks by promoting a catarrhal condition. In one case he had found a sloughing appendix adherent to another tumour. In cases with abscess he invariably made the incision as for the iliac artery. Drainage was better, and there was far less risk of opening the general peritoneal cavity. In this case, having taken special precautions, he afterwards opened the peritoneum and removed a fairly large parovarian cyst, and the patient recovered. Another associated condition was movable kidney, and at times this required treatment more than the appendix. As regards the tubercular form, the main thing to decide was whether we had to deal with a local or general condition. He quoted a case in which he had declined to operate, and which died soon after of hæmoptysis; and another which was reported cured of pulmonary and testicular tubercular disease, and in which, upon special need, he had successfully operated, after the best English opinion had opposed any operation.

Dr. CUSCADEN then read his paper on "A Case of Puerperal Infection Treated by Anti-Streptococcus Serum." (See page 249.)

Dr. SPRINGTHORPE congratulated Dr. Cuscaden upon his result, but again begged to draw the attention of the Branch to the necessity for examining blood and secretions so as to identify, if possible, the particular organism involved. Only thus could the whole question be put upon a satisfactory basis; and, now that there were a number of competent bacteriologists here, there was no sufficient excuse for not making the attempt in every case.

Dr. MARTELL was also glad that Dr. Cuscaden's case got well. He had tried the serum in three cases that all died, and in one case that he had been unable to get the serum the patient had recovered. He thought Dr. Springthorpe's suggestion excellent.

Dr. O'SULLIVAN agreed, but in puerperal septicæmia the chances were all in favour of streptococcal invasion. The dose, however, was too small. The initial dose should be 30cc, with 20 next day if necessary. He had seen it save three cases out of five in the last month. It was no use using it, as was often done, when there was diffuse purulent peritonitis. Such cases should be opened, and freely washed out. He ventured to predict that its main use would be as a prophylactic. Already some surgeons were so using it in suspected cases before operating.

Dr. MEYER's experience had been rather that of Dr. Martell's. Probably such cases were cases of mixed infection, and hence the failure of the serum. Dr. Springthorpe's suggestion was thus very valuable, but as the serum did no harm it might still be tried.

At the risk of appearing obtrusive, Dr. SPRINGTHORPE asked leave to warn members against assuming that such treatment "did no harm." These antitoxines certainly produced marked, if temporary, changes in the blood serum, and its resisting power to certain pathogenic organisms. Nature gave nothing for nothing, and they must expect some price for immunity, even though it might not be apparent on the surface. Max Adeler had humorously expressed it in the "butting"

propensities of the pew opener, who had been treated with goat's blood. It was too early to say what systematic changes were produced by the different serums so largely used, but it was unwise to say they did no harm, and extra reason for confining specific serum to specific cases that evidently required it.

Dr. MEYER explained that Marmorek and other authorities vouched for the harmlessness of this particular serum.

Mr. SYME had certainly seen local abscesses produced.

Mr. KENNY had not used it in a certain case, because serious bad results had been reported, and because examination had shown that it was not a streptococcal infection.

Mr. KENT-HUGHES had noted a small abscess ten days after a sixth injection conducted under strictly aseptic conditions.

Dr. SCOTT remarked that abscesses had formed at the Children's Hospital in four out of five cases, though the instruments were aseptic.

In reply, Dr. CUSCADEN was pleased that his paper had caused such discussion. He agreed with Dr. Springthorpe as to the advisability of isolating the organism, but the streptococcus was the general cause in such cases as his, and the serum had certainly saved her life. He had seen large abscesses in several cases at the Women's Hospital.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

REPORT OF ANNUAL MEETING, HELD AT WELLINGTON, ON MARCH 15TH, 1898, AND FOLLOWING DAYS.

Present:—Dr. Fell (President of the Branch), Dr. Martin (President of the Local Section), Dr. Fyfe (Secretary of the Council), Dr. Campbell (General Secretary), Dr. Perkins (Secretary of the Local Section), and the following representatives—Dr. Cleghorn (Blenheim), Dr. Barnett (Dunedin), Dr. Symes (Christchurch), Dr. Mackie and Dr. Roberts (Nelson), Dr. Pabst (Auckland), Dr. Porter (Richmond), Dr. Monckton (Feilding), Dr. Hosking (Masterton), Dr. Saunders (Wanganui), Dr. Bey (Greytown), Dr. Palmer (Featherston), Dr. Grace, Dr. Ewart, Dr. Young, Dr. Anson, Dr. Purdey, Dr. Rawson, Dr. Martin, Dr. Collins, Dr. Cahill, Dr. Teare, Dr. Henry, Dr. Chappell (Wellington).

Dr. CLEGHORN (ex-President) said the Branch had met in accordance with notice. The first business was the consideration and adoption of the annual report and balance-sheet. Having read these (see *Australasian Medical Gazette*, April, p. 162), he moved,—“That the report and balance-sheet be adopted.”

Dr. GRAHAM CAMPBELL, in seconding the motion said: I think it advisable to point out to members present what the Council had in view when making the suggestions in reference to alterations in the by-laws. At present the work entailed on the Secretary of the Council was of such a nature that it was impossible to expect any medical man to devote so much time to the office as would ensure it being done in a satisfactory way, and it was considered that all meetings of the Council and all business attached to them should be attended by a professional stenographer and typist. We tried this experiment at our Council meeting yesterday, and had the minutes typed and copies sent to each Section, and the result was very satisfactory. It is simply a matter of expense. We have at our disposal about £40 a year, and of that the Council has set aside 10 guineas towards the expense of the

annual meeting, which reduces the amount considerably. The work entailed on the Secretary of the Branch, the members of which are so scattered, is very great, and the expenditure in connection with his office involves from £15 to £20 a year. This leaves a small balance which might be used in professional assistance, and, from inquiries I have made, I find we can get the services we require for from £2 2s. to £3 3s. per Council meeting. If we can relieve our Secretary of so much onerous work at such a cost I think we should do so. It entails a definite place for meetings of the Council, but I think the experiment might be tried. As Dr. Cleghorn intimated, the transfer of books from place to place is calculated to lead to confusion and mismanagement on account of the want of knowledge on the part of those who might be entrusted with our business. And it is also necessary that an Association like this, which is part of a large corporate body which has to bind itself down to certain formalities, should have its work performed in a formal and businesslike manner. If we hold our meetings in Wellington, which taps Nelson and the whole of the North Island, or in Christchurch, which represents more than half our membership in the Association, we should be justified in altering our by-laws. It is a question that needs time for consideration, and if we decide on any alteration we must either leave the election of Secretary in abeyance or elect one to occupy the position nominally. I understand it has been the regular routine to hold the next meeting after Wellington in Auckland. It is impossible to expect Dr. Fyffe to go to Auckland to initiate the Secretary there into his duties, and I do not think the Auckland Secretary would care to come down to Wellington in order to take over the business. Consequently, the transfer would have to be made by writing, and it is obvious that under such circumstances a good deal of it would get into chaos. It would assist us materially if members not on the Council would aid us by their advice, for discussion might bring out some points not referred to in the report, but which would be to the advantage of members generally to know.

Dr. GRACE: I am afraid only one thing is possible, and that is to make Wellington the headquarters of the New Zealand Branch of the British Medical Association. I know it has many drawbacks, but in the end it would cost everybody less money, and render it easier to maintain some sort of organisation. The backbone of the difficulty is to be found in the want of money. In a very short time the profession will realise its importance and the extensive nature of its responsibilities. Without some Association with authority behind it—and which rests on a broader basis than it does now in this country—the profession cannot be placed in the position it is entitled to hold. It is possible, I know, that in asking that Wellington shall be the headquarters of the Branch some may think that this miserable little village is asking too much, but it is purely with the view of expressing in this small way the interest I take in the British Medical Association that I make these few remarks.

Dr. FYFFE: As Secretary of the Council I think I ought to apologise to Dr. Cleghorn and the members of the Association for not being able to do the work as it should be done. The work has increased a great deal, and I think it is more than one man doing any practice at all can properly manage. I intend to resign my position as Secretary, and I feel sure that in the interests of the Association Dr. Campbell's proposal is the right one. As far as money goes, he explained yesterday to the Council that there was sufficient to provide the stenographer and the typing of the reports, and it seems

to me the best course for the Association is to pass the resolution.

Dr. PORTER: I quite agree with Dr. Fyffe. It is perfectly absurd to expect any man doing any practice to perform the work required. It should be done professionally, even if it necessitates a call upon members of the Association.

Dr. CAMPBELL: I regret very much that the Auckland representatives have not come down, because with the exception of Auckland and Napier we are fully represented, and it might be advisable—I believe they are to be here to-night—to devote a few minutes to this discussion when they are here to give their opinion on the matter.

Dr. CLEGHORN: I think something of this nature would meet the requirements,—“That the by-laws be altered in the direction of appointing a permanent Secretary, to be also Secretary to the Council, with power to employ clerical assistance, more especially to fully report the proceedings of meetings of Council for the benefit of the various Sections.”

Dr. FYFFE: As Secretary of the Council, I should be very glad to propose that. I have had to send out three sets of papers to the members—notice of the annual meeting, the club circular, and another notice of the annual meeting—in addition to other work, and I have found that it takes a considerable time to do it. The office is no sinecure, nor is that of the General Secretary, for Dr. Campbell has done a great deal of work which has taken up a large amount of his time, and without any benefit to himself. He has increased the membership of the Branch by 78, and I think the Association owes him a great debt of gratitude.

Dr. MONCKTON seconded the motion, which was carried unanimously.

Dr. CLEGHORN: Another suggestion for consideration contained in the report is the appointment of a permanent Parliamentary Secretary. We all know that Dr. Mason has performed the duties during the last year very satisfactorily, and I believe he is in a position to carry them on. I consider such an appointment a very valuable one to the Association.

Dr. CAMPBELL: Dr. Mason was appointed to interview the Government in respect of the Public Health Act, and besides that a great deal has come up of interest to the medical profession—for instance, the new medical registration question. I think it is very desirable to have someone to represent us in Parliamentary matters, for what is everybody's business is no one's business. The subject of medical registration is one in which we are all interested, as we all wish to keep the profession as pure as possible. Unless our interests are guarded, and the profession as a whole shows some interest in it, the Government will take no action on our behalf, and we cannot expect them to do so. I consider Dr. Mason eminently fitted for the position, and I think it would also be desirable to appoint him *ex officio* a member of the Council. Although the by-laws do not provide for that, we could make an alteration allowing that to be done. Occupying the position of Parliamentary Secretary, Agent, or Convener, he could keep us informed of matters in which we are interested. It may be remembered that last year we were informed that an application was before the House to reinstate upon the register the name of Charles James Russell, of Christchurch, a man who had served five years in Lyttelton gaol. There are cases like that which we have to keep our eyes upon.

Dr. MARTIN moved,—“That a permanent Parliamentary Secretary be appointed, and that it be Dr. Mason; and that it be a recommendation to the Council to take steps to secure an *ex officio* seat on the

Council for Dr. Mason, and that it be his duty to advise the Council from time to time."

Dr. CAMPBELL seconded the motion, which was carried unanimously.

Motion,—"That the report and balance-sheet be adopted," agreed to.

Dr. CLEGHORN: I have to thank members of this Branch for the very pleasant time I have spent during my term of office as President. It has been a period I shall be able to look back upon with pride. I have especially to thank Dr. Campbell and Dr. Fyfe for the energy and skill they have displayed in carrying out their duties, and for having made my office practically a sinecure. I can only hope that my successors will have as good a time as I have had.

Dr. FELL, having been installed as President, said: Gentlemen,—I thank you very sincerely for the honour conferred on me in calling me to this chair. As I have to address you at length to-night, I do not propose to occupy any more of your time now, so will call upon Mr. Symes to read his paper.

Dr. ROBERTS: I have to state that Dr. Hudson has intimated that he intends to leave for England in May, and is willing to represent the Branch in England. I suggest that his offer should be accepted.

Dr. FYFFE: I have received a letter from Dr. Hudson this morning, in which he states that if there is any business he can do for the Branch at home he will be very glad to do it, or to represent the Branch at the meeting of the British Medical Association.

Dr. CAMPBELL: The Secretary at home wrote last year asking for nominations for our Branch, but as it came a week before the annual meeting it was quite impossible for us to notify anybody to act for us.

Resolved,—"That the matter be left to the Council to deal with."

(To be continued.)

CANTERBURY SECTION OF THE N.Z. BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting was held in the Caledonian Rooms on March 10th, 1898.

Present: Dr. Fairman (President), in the chair; Drs. Symes, C. M. Anderson, Thomas, Campbell, Hacon, Trotter, Manning, Fenwick, and Irving.

Drs. Orchard and Crook were present as visitors.

Drs. Campbell and Symes were appointed to wait upon the Mayor and make suggestions as to the equipment and position of the proposed morgue.

The Library Committee reported that a letter had been sent to the Law Society pointing out that the initial expense of providing for the medical library had now been recouped, and offering a reduced rent at one guinea per quarter. No answer as yet to hand.

A cordial vote of thanks was passed to Dr. Jennings for a handsome donation of books to the library.

Dr. THOMAS opened a discussion on the choice of anaesthetics in dental surgery, giving his reasons for bringing the subject forward, and inviting expressions of opinion from the members.

Dr. CAMPBELL believed that the effect of ether upon the lungs and kidneys was overlooked or under estimated.

Dr. FENWICK pointed out that recent experiment proved that chloroform was seven times stronger than ether, and there was an impression that it was in consequence somewhat less safe.

Dr. C. M. ANDERSON, although he generally used ether, had been obliged in a fair number of instances to substitute chloroform owing to the effect of ether on the lungs.

Dr. FAIRMAN never employed ether in advanced age, or in children.

The consensus of opinion was that the anaesthetist was the sole judge of what anaesthetic should be used.

Drs. Symes and Campbell were appointed as delegates to the annual meeting in Wellington.

Dr. THOMAS reported that he had interviewed the chemist involved in Dr. Gerald Harper's "Influenza Cure," and was informed that the labels were now exhausted, and no more would be printed.

In reference to volunteering evidence not asked for in a recent medico-legal case, Dr. SYMES explained that he acted as Crown expert, and it was incumbent on him to give every aspect of the case, and to conceal nothing that would be either in favour of or against the accused.

Dr. MANNING read an interesting paper on "Tumours of the Eye," giving the differential diagnosis in intra-ocular sarcoma and glioma. His paper included details of spindle-celled sarcoma, melanotic sarcoma, and one of glioma in a baby 14 months old, with microscopic specimens. In the discussion,

Dr. C. M. ANDERSON related a case in which glioma had occurred in both eyes.

Dr. HACON read a paper on the "Inspection of Meat and Milk," and advised an organised system of inspection in all meat and foods exported as a guarantee of quality to the consumer.

He laid on the table a pamphlet issued by the Provincial Board of Health, Ontario, on the same subject.

Dr. FENWICK read an interesting article on the uses of the urethroscope, illustrated by a series of urethral models. (See A.M.G., May, p. 213.) A practical demonstration was also given on a patient kindly submitted by Dr. Fairman.

An ordinary monthly meeting was held in the Caledonian Rooms on April 14th, 1898.

Present: Dr. Campbell (Vice-President), in the chair; Drs. Thomas, C. M. Anderson, Manning, Trevor, Fenwick, Irving, R. W. Anderson, and Greenwood.

A letter was read from Dr. Cordner (Rakaia), in relation to the wording of death certificates, the present form compelling the medical attendant either to visit after death, or to certify without positive evidence.

On the motion of Dr. Thomas, it was decided to recommend the insertion of the words, "As I am informed and believe."

The report of the Council for 1897-8 was read, and Dr. Campbell furnished the meeting with full details of the Congress and Council meetings.

Dr. Hayes (Temuka) wrote suggesting the establishment of an agency or bureau for the providing of *locum tenens*, or exchange of practices; also of a central pathologist, who would examine specimens. The subject was considered an important one in view of the possible advantage to members, and the Hon. Sec. was instructed to forward a circular to each member of the Section informing him that a list of *locum tenens* and of practitioners willing to exchange practices temporarily would be kept by the Secretary, a fee of 10s. 6d. being chargeable in each successful issue.

Dr. Greenwood was elected a member of the Committee *vice* Dr. Diamond, resigned.

Dr. TREVOR (Ashburton) read an interesting paper on two cases occurring in his practice. (1) Fracture of forearm, resulting in disarticulation of the shoulder, and good recovery. (2) Supra-pubic lithotomy with excellent result, although by an unfortunate accident the peritoneum was opened, causing protrusion of bowel.

The paper was listened to with great interest, and the CHAIRMAN thanked Dr. Trevor for his practical con-

tribution to the Society, and especially for his kindness in coming to town to read it in person. He recalled a case of a female patient, who, having passed a pen-holder into the bladder, had undergone a vesico-vaginal operation for its removal.

Dr. IRVING thought a particular position might have lessened the risk of wounding the peritoneum.

Dr. THOMAS mentioned a case of calculus in an old lady of 84, which he had removed by lithectomy. She lived for two years after the operation, but suffered from incontinence of urine.

Dr. THOMAS read an exhaustive paper on hypnotism, which gave rise to an interesting and prolonged discussion.

REMOVAL OF A FOREIGN BODY FROM THE LEFT BRONCHUS OF A CHILD.

BY L. E. BARNETT, F.R.C.S., DUNEDIN.

READ BEFORE THE ANNUAL MEETING OF THE N.Z. BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

ANDREW S., aged 10 months, living at Seacliff, was admitted under my care to Dunedin Hospital on the 27th August last. The mother and Dr. Truby King, of Seacliff Asylum, gave the following history:—The baby was crawling on the floor three days previously, playing, as the mother thought, with a crust of bread and a half-cooked potato—"strange toys for an infant." Suddenly the child choked. She ran to him, and forced her finger to the back of his mouth. She felt something hard, but could not remove it. She hurried with her baby then to the asylum for medical aid. Dr. Greig, the assistant medical officer, saw the child first, and he too felt something as hard as bone with his finger far back down the throat, but could not remove it. Dr. Truby King saw the baby later, but by this time neither he nor Dr. Greig could feel or see anything in the throat. The symptoms, however, pointed to a foreign body in the air passages. It was presumed that the body was either crust or potato, and might soften in the course of time and be expelled. The symptoms however, became much more urgent, and after the lapse of three days the little patient's condition was so critical that Dr. Truby King, who diagnosed the obstruction as being in the left bronchus, insisted upon the child being taken to the hospital. When I saw the infant he was collapsing badly. His respirations were 60, and his pulse 170. There was marked retraction of the lower ribs on both sides, but vocal fremitus and resonance were much less marked on the left side, and breath sounds were also feebler there. There was no difference discernible by percussion on the two sides. On the right side the respiratory murmur was much harsher and noisier than normal puerile breathing.

The diagnosis was a foreign body partially obstructing the left bronchus, and it was

decided at a consultation of several members of the staff to perform tracheotomy at once, and then try to dislodge the obstructing body. I accordingly forthwith made an opening in the trachea fully half an inch in length, stitched the edges of the trachea to the skin margins, and held the wound widely open by sutures attached to artery forceps. The child was then held up by the feet and most vigorously shaken and pommelled, but without avail. A careful and prolonged attempt was then made with probe and laryngeal forceps, directed both upwards and downwards, to locate and remove the foreign body. The probe was passed down the trachea, and about the bifurcation seemed to encounter something decidedly gritty to the feel, but yet there was no obstruction to the probe, which could be passed far down into either bronchus. With the forceps, too, something was scraped against repeatedly, but nothing could be removed. I was quite at a loss to explain the gritty sensation. Could it be possible, I thought, that the tracheal rings in an infant could communicate so gritty a sensation? It seemed to me then the only, albeit a very poor, theory. I had no thought of anything tubular having been swallowed. I expected potato or crust. In the hope that as the child came out from under the influence of the anæsthetic he might cough, loosen the body and expel it from the tracheal wound without any danger from spasm of the glottis, I decided to desist for the present, and make another attempt if the obstructing body still remained *in situ* in the afternoon, whereby I could have the advantage of the assistance of Dr. Lindo Ferguson, a specialist in diseases of the throat, &c. No tube was inserted in the tracheal wound. It was left widely gaping. Towards evening the child, now almost moribund, was again anæsthetized, and a fresh attack was made on the foreign body. The gritty feeling was again detected, more easily than before. Apparently whatever caused this gritty sensation had moved closer to the tracheal wound. Dr. Ferguson felt confident that the foreign body was the cause of this sensation, and suggested that it might be a flat object longitudinally situated, allowing the probe to pass it, and allowing a certain amount of air to enter. The mystery was soon solved. With variously shaped forceps kindly brought down by Dr. Ferguson, and with his skilled guidance and help, I persevered in my efforts to extract the gritty object. At last I brought away in a pair of Toynbee's ear forceps a tiny scale-like fragment, red on one side and white on the other. It was a bit of a crayfish shell, and was followed by other little pieces similarly extracted, and finally by

the large object which I now show you. As you see, it is a portion of a crayfish's antenna, 1 inch long, and 1 inch in diameter. The surface is segmented, and at each segmental junction there are well-marked bristles directed obliquely. The portion of antenna was swallowed with the bristles directed backwards—its passage onwards was thus favoured in the same way as is the progress upwards of one of those bristly arms of grass which in childhood's days we put up our sleeve. The piece of antenna went onwards down the trachea and into the left bronchus until it could go no further. Its upper end, I believe, projected a little over the orifice of the right bronchus, and accounted for the noisy breathing in the right lung. The bristles, too, from their obliquity, hindered the dislodgment of the antenna. Inversion and shaking were quite useless. The fact of the antenna being hollow when the child put it into his mouth no doubt prevented a speedy death, for the body was quite large enough to fill the left bronchus, and, indeed, the calibre of the trachea did not seem wider than the widest part of the antenna. It is to be observed that no mention of crayfish having been within reach of the child was given by the mother. On being questioned afterwards she said they had had crayfish about a fortnight before, and this piece had probably been taken in the house again either by one of the children or by the domestic cat, and the baby in crawling had espied it and transferred it to his mouth according to the usual custom of all babies with all objects.

After removal of the foreign body I partly sutured the tracheal wound, but left a portion of it open in case of any occlusion of the glottis subsequently occurring. The wound speedily granulated, and in a fortnight the proud mother carried her baby home again, whole and as well as ever it had been.

DISCUSSION.

Dr. Barnett having read his paper on this subject, Dr. FELL said this was a most unique and interesting case. He could easily understand how inexplicable it must have seemed at the time, and they had to congratulate Dr. Barnett on the way he had treated the case. He (Dr. Fell) once had a case, not very similar, but sufficiently remarkable, perhaps, to be worth mentioning. A child was brought to him in a state of high fever, and on examination he found extensive pneumonia and inflammation of the lung. He operated, and took out a quantity of pus from the lung, but there remained a small sinus. Two or three weeks after, the mother noticed something in the opening, and, on being summoned, I drew out a blade of grass about two inches long. Then the mother remembered that the child had been playing with the grass, and had had a fit of choking at the time. That blade of grass had doubtless been in the glottis, and had found its way out by his operation.

Dr. MARTIN said Dr. Barnett's case was not altogether a unique one. He remembered a case which occurred during his student days where a child was brought to the hospital whose mother said it had swallowed a little reed instrument. These instruments were very much in use amongst children at that time. They were about an inch long, and would play a tune something like that of the bagpipes. This child, instead of blowing through the tube, inhaled the air, and the top of the reed instrument was drawn into the bronchus. Examination practically showed nothing at all, but the child was kept in the hospital for some time on account of the squeaking sound emitted by him. He afterwards developed pneumonia, and that gave credence to the story we had heard. Tracheotomy was performed and the instrument extracted, with the result that the child ultimately got well. The question of foreign bodies in the lungs was a very interesting one, and people hardly appreciated the amount of matter which could be taken into the lungs without causing very much mischief. He remembered the case of a man who was sent out to New Zealand for consumption, and in the vestibule of the Occidental Hotel he had a very severe attack of coughing and spitting, and ultimately he coughed up three inches of a clay pipe. The only other case he had been connected with was that of a child which had been sent in from one of the outlying districts for croup, as it was called. The child certainly was choking, and the house surgeon was sent for, but could not be found. He (Dr. Martin) performed tracheotomy, but could not get in a tube, and in a quarter of an hour the child died, when it was found that the trouble had arisen through a peanut. The importance lay in knowing whether there are distinct symptoms pointing to the presence of a foreign body. Here was a case which was thought to be ordinary diphtheria, and was eventually found to be a foreign body. It led one to the opinion that in all cases of obstruction, whether bronchial or pneumonic trouble, one should perform tracheotomy and make an examination.

Dr. FYFFE said it was a very important thing to know what the physical signs were in foreign bodies, either in the bronchus, or partial obstruction of the trachea. He had seen three cases, all of which were foreign bodies. There was an exaggerated breathing in the right lung, and hardly any in the left. In the case mentioned by Dr. Barnett there would be exaggerated breathing in one bronchus, and ordinary breathing in the other. He would like to say a word about a case in St. George's Hospital. Brunel, the great engineer, on one occasion was playing with his children, and amusing them by throwing up a half-sovereign and catching it in his mouth. In doing this the coin slipped down into his right bronchus. All kinds of instruments were tried, but the coin could not be got out. Brunel, being an ingenious man, had a chair made which threw him back almost on to his head when worked, and one day while practising in this way the half-sovereign came out, and the coin was now to be seen in St. George's.

Dr. GRACE said he had only seen one case, that of a little girl, who was supposed to have a foreign body in the chest. He made an examination, and satisfied himself by percussion that it was a partial obstruction of the bronchus, and advised tracheotomy. His friends did not have very great faith in his diagnosis, and in spite of his desire to do something nothing was done. Fortunately, two days after, the child had a fit of coughing, and threw up a bean. It had not completely closed up the bronchus, but he thought they would have been justified in performing tracheotomy.

Dr. CLEGHORN had had two cases, one lasting for some months, and the other for more than a year. The chief symptoms were slight irritation. In one the patient got well after coughing up a piece of mutton bone. In another case he had a lady become ill after the extraction of some teeth. The lung was cut down upon, and horribly offensive matter came out, but no tooth came out as was suspected. In that case it was probable that some blood and pus had got into the lung.

Dr. BARNETT thanked the Association for the manner in which members had listened to and discussed his paper, and the kind remarks which had been made. Dr. Fell had referred to a case where a blade of grass had caused a serious obstruction, and in reading cases of foreign bodies getting into the bronchus and air passages, he himself had come across cases where oats and straw had been drawn into the air passages and has carried the germs of actinomycosis into the lung. Dr. Martin had said that the case he had given was not unique, and he had not claimed that it was; but he had never found any case recorded of the antenna of a crayfish getting into the bronchus, although there were many cases of other foreign bodies. He had also read of cases where portions of reed instruments and a child's trumpet had been drawn in. Another reported case was that of a hollow pencil point protector drawn into a bronchus, but the surgeon knew what he had to deal with in that case, and had special instruments for the purpose, as he was quite unable to draw it with the ordinary forms of forceps. He thought it well to observe that where one was tolerably certain that a foreign body had passed below the level of the glottis it was a very risky thing to turn the patient upside down without first performing tracheotomy. In the historical case mentioned by Dr. Fyfe there was a risk of the coin impinging. Tracheotomy should always be performed prior to inversion of the body where it was likely the foreign body had passed below the vocal chord. It was well, also, to use a tube in tracheotomy and to leave the wound as wide open as possible, otherwise it might interfere with the expulsion if you simply left the wound sutured.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting held on Thursday, May 26, 1898. Present: The President (Dr. Giles), Drs. Lendon, Swift, J. C. Verco, Evans, Gregerson, Gunson, Cavanagh-Mainwaring, J. A. G. Hamilton, Michie, Marten, G. C. Hayward, Perks, A. A. Hamilton, Corbin, H. H. Wigg, T. K. Hamilton, A. F. Smith Professor Watson, and the Hon. Secretary (Dr. W. T. Hayward).

Dr. LENDON showed an infant with a deformed lower limb, caused apparently by absence of the diaphysis of the left femur. He could recall seeing in England an instance of this deformity, where the lower epiphysis of the femur seemed to be directly applied to the upper epiphysis, both being well developed, so that the trochanters and condyles seemed quite natural. The knee-joint and leg were normal.

Dr. T. K. HAMILTON exhibited *Two Cases of Staphylomatous Cornea, in which Dr. Kenneth Scott's operation for their reparation had been performed.*

No. 1.—M. K., female, aged 16, presented herself on April 6th, 1895, with a conical staphyloma of the lower and inner part of the left cornea (*staphyloma totale concicum*), and with five-eighths of the corneal surface

densely leucomatous. T. = + ? and P. acta. The history dated from a severe parenchymatous keratitis seven years before. She complained of photophobia and pain so intense as to prevent her sleeping at night. Scott's operation, Fig. 10* was performed a few days afterwards, and the centre of the cornea was subsequently tattooed black according to the method suggested by Dr. Webster Fox, of Philadelphia, preparatory to tattooing the circumference brown to imitate the colour of the iris. The present condition of the eye is as follows: Eye comfortable; no pain since the operation; cornea a good shape, the staphylomatous protrusion being nearly obliterated; T. = + ?; P. acta; small opacity of lens capsule; V. = $\frac{5}{6}$.

No. 2.—H. M., female, aged 16, when 15 months old had severe inflammation of the left eye, which has left a hemispherical protuberance of the cornea (*staphyloma totale sphaericum*), the peripheral portion of which presented the characteristic bluish-black appearance peculiar to these cases, and the remainder that of a dense leucoma adhaerens. She complained of pain; there was some photophobia, and she could not without some effort cover the globe with the lids. Scott's operation, Fig. No. 1, was performed on April 7th, 1897, and the whole six sutures inserted as directed in his article. The case did well, and none of the sutures sloughed out as Dr. Scott found them to do in one of his recorded cases. The pupillary area of the cornea was afterwards tattooed black. The present condition is: Eye quite comfortable; no pain since the operation; lids cover the eye easily; corneal protrusion very much reduced in size; T. = n.

The very satisfactory results of these two cases serve to illustrate the efficiency of this procedure in staphylomatous globes, and how thereby eyeballs, thus affected, can be saved and made fairly presentable in appearance, which, on account of the increasing protrusion, would otherwise require enucleation to relieve symptoms, and possibly in some cases to avert sympathetic disease of the other eye.

Two Cases of Foreign Bodies in the Eyeball.—

No. 1.—S. O., male, aged 19, on September 20th, 1897, when shoeing a horse got a chip of iron into his left eye. When seen about three weeks after the accident a scar was found on the lower part of the cornea. The lens showed striated opacities, and what looked like a piece of metal embedded in its substance. V. = $\frac{5}{6}$ some photophobia. With a Snell's electro-magnet this piece of iron (exhibited), which weighs about 0.001 m.g., was removed. A few days afterwards, the tension having gone up, a linear extraction was performed. Present condition: Pupil acts; a small ring of capsule remains; V. c + 13D. $\odot$ + 1D. ax. 90° $\frac{5}{6}$ and $\odot$ + 18D $\odot$ + 1D. ax. 90° J. 1 at 22 c.m.

No. 2.—W. H., male, aged 32. On 18th of April last, when shoeing a horse, a piece of rusty nail from the old shoe, which was being removed, struck his left eye. He had considerable pain at the time, some bleeding, and, in two hours after the accident, no vision. When seen on the third day there was a slight "shrinking pain" on pressure; the upper and lower part of the globe chemosed with a sulcus on the outer part of the sclera between the two raised portions. In this sulcus a wound, already united, could be seen. P. dilated and inactive: iris greenish-yellow colour; cornea baxy; ant. chamber deep with a large hypopyon filling its lower part; T. = -1. A foreign body in the eyeball being suspected, the patient was kept in a dark room, atropine, hot stupes and pilocarpine (hypodermically) used. Some days subsequently, as the hypopyon increased in size, an opening was made with the canterly

in the middle and lower part of the cornea for the evacuation of the exudate, but even though the corneal wound thus made was kept open for some time the hypopion was never entirely got rid of. On May 29th the eye became more painful and the chemosis increased, although the tension was low, and a protrusion of the cautery wound near the limbus had commenced. An exploratory examination was made, and a piece of metal was struck with the probe at the bottom of the wound. The electro-magnet was applied, and this piece of iron (exhibited) was brought to the surface and removed through an enlarged opening with a forceps. The piece measures $6 \times 4 \times 1$ m.m., weighs 0.1 d.g., and shows spots of oxide discoloration on its surface. The eye is now quiet, no pain since the removal of the foreign body. T. = n. P. closed and adherent ant. chambers shallow; cornea hazy over its lower part, and a linear cicatrix 6 m.m. long extends horizontally outwards through the sclera commencing about 4 m.m. from the corneal limbus.

The chief interest of this latter case is in connection with the course the foreign body took in the eyeball. That it entered and penetrated the sclerotic seems clear from the appearance of the wound, from no trace of its presence anywhere on the surface of the globe, and the reduced tension after the accident, but how it reached the lower part of the corneal limbus, a distance of nearly 1 c.m. from its point of entrance into the globe, and how it subsequently found its way toward the surface, seems difficult to explain. Foreign bodies propelled through the sclera are usually either arrested in the coats of the eye, where they may remain or be spontaneously expelled by an ulceration process afterwards, or they pass right through into the vitreous. In this case the piece of iron must have entered just outside the ciliary processes and may have passed into the globe obliquely, if the patient's head were turned in a certain direction to allow of its doing so, and thus may have come in contact with the iris, where, by setting up irritation, its expulsion was facilitated. It is well known that the uvea and especially the iris and ciliary body exhibit the greatest reaction to injury of any kind as, for example, to the presence of a foreign body. This piece of iron may not have been aseptic, or through oxidation may have acted as a chemical irritant. The iritis and hypopion, both of which appeared very soon after the injury, and the apparent absence of marked cyclitis, favour the idea that it was an iritic irritation which existed. A localized suppuration then probably brought about the condition which would have eventuated in its expulsion if operative interference had not been resorted to. But, be the explanation what it may, the foreign body certainly pursued a most unusual course, and by doing so has brought a tedious and painful condition of eye to a rapid and most satisfactory termination. Lastly, the presence of a hypopion in a case like the present one, where there was no suppurative keratitis, proves the correctness of the contention of those authorities who say that the exudation of hypopion can be thrown out entirely by the uvea quite independently of and apart from corneal contamination.

PATHOLOGICAL SPECIMENS.

Professor WATSON exhibited following specimens /—
1. Round-celled sarcoma of testicle the size of a turkey's egg, from a gentleman *æt.* 44, who first became aware of a swelling six months ago.—Dr. Humphrey-Marten.

2. Thickened appendix with swollen mucosa and narrowed lumen, from a woman *æt.* 22. It shows some fine cobweb adhesions towards its extreme point, where

there is a minute opening, from which a drop of clear fluid exuded during the operation.—Dr. Jay.

3. Lingual cancer, removed by helicoidal incision, which permitted of shutting off the raw surface from the floor of the mouth. From a man *æt.* 41.—Dr. J. A. G. Hamilton.

4. Elongated worm-like polyp, removed from the uterine cervix of an old woman. Its outward appearance resembles that of the thickened vermiform appendix just shown.—Dr. J. A. G. Hamilton.

5. Egg-shaped polyp, which had passed through the cervical canal and protruded at the vulva. At first sight it was thought to be an inverted uterus. It was taken from a nullipara *æt.* 36, who had suffered from metrorrhagia for two years, and for which she had been bled, without any tumour being noticed, one year ago.—Dr. Way.

6. Pear-shaped polyp which mimicked pregnancy, and which grew from the fundus of uterus, from the cavity of which it was delivered by means of a purposive bilateral incision of the os and an accidental tear of the posterior lip, with conoidal excavation of the tumour itself. Nullipara *æt.* 32.—Dr. Way.

7. Dermoid of right ovary, from a nullipara *æt.* 28, in whom tubal pregnancy was suspected. Its inner surface shows a small mamma surrounded by a long fringe of auburn hair of a somewhat lighter shade than the *chevelure* of the patient.—Dr. Way.

8. Parovarian cyst like a shell-less duck egg. From the fact that the curette brought away large shreds of decidua-like mucosa, from a married woman *æt.* 27, with cessation of menses, and from its form and position as felt P.V. It was diagnosed as probably a tubal pregnancy.—Dr. Way.

9. Senile uterus, with bossy broad ligament myoma of the left side. The marked obesity of the patient, a multipara *æt.* 55, caused the vaginal route to be chosen, and the uterus with the tumour was removed P.V. by Segonds' method of morcellation. A small collection of pus has formed in the left vagina—peritoneal section—area, and will retard the convalescence by several days. The clump sloughs have not yet separated (14th day).—Dr. Way.

10. Squamous-celled carcinoma of cervix and everted os, from a multipara *æt.* 50. Doyens clamps passed with lock above. The uterus and adnexa were removed *en bloc*. Sloughs came away on the ninth and twelfth days.—Dr. Way.

11. Uterus of a multipara *æt.* 61, removed by vaginal hysterectomy. There is a peculiar inversion of the os, and the cervical canal is invaded by a glandular carcinoma. A lateral spread of the neoplasm was simulated by the scar-tissue replacing a bygone hidden laceration into the left paracervix. The parts on this side were so fixed that Way failed to effect his favorite demi-torsion of the broad ligament pedicle with the lock of the clamp above. The clamps were left on for 48 hours.—Dr. Way.

12. Left breast and axillary contents, &c., of a very obese multipara *æt.* 55. A cancerous growth occupies the lower quadrant of the gland. Kocher's incision was used.—Dr. Way.

13. Right breast of an exceedingly spare maiden lady, *æt.* 37. The cancer is situated in the upper or clavicular segment of the gland, which was in consequence removed by Hamilton Russell's modification of Lister's method. This patient's mother and natural aunt both succumbed to breast cancer.—Dr. Way.

14. Large hydatid from base of right lung of a girl *et. 23*. Less than an inch of eighth rib in front of angle was excised. Four days after the operation the patient succumbed to an attack of dyspnoea, only temporarily relieved by oxygen inhalation. The lung was densely adherent, compressed and airless for several inches around the area of absolute impact and fusion of the costal and parietal pleurae. This area was about the size of a crown piece. The opening into the sac was just outside its upper border, and therefore through compressed lung recognisable by its pigment. The patient had been aspirated thirteen months previously for pleurisy (?), hence dense adhesions (?). Her brother and sister have both been afflicted with hydatid disease of the liver.—Dr. Way.

15. Right pyosalpinx, with abscess and cyst of ovary of same side. During the operation the pyosalpinx, the abscess, and the cyst burst in rapid sequence. The peritoneal cavity, which was sluiced out with warm saline solution, was closed without a drain. Although the other (left) tube and ovary were interadherent and, in addition, bound down to the meso-sigmoid, they were liberated and left behind for sentimental reasons, and Pat., *et. 19*, now complains of a pain in that side, although three weeks have elapsed since the operation.—Dr. Way.

16. Stomach of a pig which had been slightly indisposed for several weeks before it was slaughtered. A meat-skewer, swallowed during life, is partially embedded in the walls of the stomach, and projects into the lesser omentum and pancreas.—Mr. Lewis, Stud. Med.

17. Excised omentum, stretched scar-tissue, superfluous skin, and thickened sac, of a large post-operative linea-alba hernia, which followed an abdominal oöphorectomy nine years ago. The ablation of the massive omentum was necessary in order to procure room within the abdomen for the replaced bowels. Dr. Way closed the abdomen in six separate layers with tendon (except the cutis, which was sewn with horsehair). Pat. will go home to-morrow (25th day).

18. Two halves of the same tendon. One half, placed in carbolic 1 in 20, retains all its good qualities after 24 hours' immersion. The other half, soaked in corrosive 1 in 1000 for the same time, has been transferred into a jelly-like mass.

19. Two photographs of a wooden operating table devised by Dr. Reid, of Sale. Its clever mechanism renders possible the application of every position known in surgery.

20. Dahlgren's Norwegian trephining instrument which cuts the skull on the principle of the grocer's salmon-tin opener.

21. General synostosis of vertebrae, from an old mare over 30. The vertebral column is a solid rod, in which a fracture has occurred.—Mr. F. Johnson, Vet. Surg.

Minutes of last meeting taken as read on motion of Drs. LONDON and SWIFT, and confirmed.

Dr. A. E. Wigg was elected Auditor.

Drs. F. J. Chapple and H. M. Evans were elected members of the S.A. Branch.

Dr. MORGAN read his paper on "The Preparation and Uses of Kangaroo Tendons." (To appear in a future issue.)

The PRESIDENT stated that he was in the habit of preserving his kangaroo tendons in carbolic oil, soaking them in ether before using. Dr. Morgan's paper would be very useful to members of the profession desiring information on the subject.

The PRESIDENT read his paper on "Two Cases of Hepatic Abscess." (See p. 244).

Dr. MARTEN read his paper on "A Case of Subphrenic Abscess." (See p. 246).

Professor WATSON spoke on the subject, and mentioned a case of hepatic abscess following typhoid fever.

Dr. J. A. G. HAMILTON related a case of subphrenic abscess following the rupture of a gastric ulcer.

Dr. HAYWARD said that it was interesting that papers on hepatic and subphrenic abscess should be read the same night. It was only in recent years that the latter subject had been written on; he doubted if even now it was alluded to in the text-books on medicine. A few years ago Dr. Dickinson published an interesting paper on the subject in the *B.M. Journal*, and from it he gathered that most of these cases were due to a perforation in the upper curvature of the stomach in cases of gastric ulcer. Doubtless this form of abscess had often been confounded with the single hepatic abscess, and this might in a measure explain the different characteristics of the pus described as being found in operations in cases of the disease. At any rate, there could be no doubt that no one disease was responsible for hepatic abscess. It was probable that the different appearances found were due to the presence of different bacilli. It was very desirable that every case of either disease should be reported.

Dr. J. C. VERO had had little or no experience of cases of hepatic abscess. He gave an account of a case of subphrenic abscess resulting from a suppurating hydatid of the liver. In cases of hepatic abscess the contents might be either ordinary pus or the grumous chocolate-coloured fluid.

The PRESIDENT drew attention to the fact that in the cases he had recorded that night in one the pus was pure, and in the other chocolate-coloured.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 59th meeting of the Queensland Branch of the British Medical Association was held on Friday evening, 1st April.

There were present: Dr. Connolly, in the chair; Drs. Nall, Halford, Taylor, Marks, O'Doherty, Orr, Carosso.

The minutes having been read and confirmed, a letter was read from a country practitioner relating how he had been called some fifteen miles by water in a boat to examine a case of "found dead." He had sent in an account for six guineas, but because the case had ended in an inquiry it had passed out of the Police Department, who would have paid the account, to the Department of Justice, who declared that the legal fee for the work done was £2 7s., a sum of money which the writer of the letter had not yet received.

The SECRETARY pointed out that the law authorities were under the impression that they were bound to pay only the sum laid down by the Medical Act. The Medical Act laid down that that was the proper fee (£2 7s.), and, moreover, made it punishable by a fine of £100 not to obey the summons of the justice who ordered the work to be done. He thought that it would strengthen the hands of the Medical Board if a resolution were passed by the Branch to call their attention to the letter. The Board, he thought, would do anything they could to get a new Act. They were pretty unanimous in condemning the old. He thought the attention of the Attorney-General might for the present be called to the letter, and perhaps he would see his way to pay a better fee.

Dr. CONNOLLY exhibited a collection of appliances for the treatment of talipes valgus belonging to Mr.

Gray, bootmaker, many of which were pronounced likely to be beneficial by the members.

Dr. JACKSON exhibited a case of tumour of the lower and outer part of the upper arm. It had made its appearance about twelve months previously as a small lump like a "bruise." Under the influence of painting with iodine it had "broken," and after discharging a little it had grown much smaller. She had not been to see the doctor again until this day. There was a cake of swelling in the skin, and a small scab on it. When the latter was removed a probe could be passed superficial to the lump, but beneath the skin for an inch or two in any direction. When she moved her arm at the elbow there was a curious creaking noise to be felt and heard at the tumour, but when the latter was raised up, as it could be by the finger, from the tissues below, it was no longer audible. The noise seemed to be due to the creaking of a cake of gristly material of which the tumour consisted rubbing on the tissues below it. It was proposed to lay it open at an early date and remove the mass.

Dr. JACKSON also exhibited a case with swollen cervical, axillary, and inguinal glands in an elderly man. The growths had first appeared over two years ago in the neck glands, subsequently in the other places. There had been considerable evidence of pressure on the nerves in each part, but beyond the formation of an abscess or two in various parts no great interference with the general health. *Filaria* had been discovered in his blood by one observer, but though he had been repeatedly examined lately none had been observed. He was inclined to think that the case was one of Lymphadenoma with *Filaria* superadded.

Dr. NALL then read a paper on a case of Beri-beri coming from a country district in Queensland. (*A.M.G.*, p. 149.)

NOTICE OF MOTION.

Dr. ORR gave notice that at the next general meeting he would move,—“That copies of the *Brisbane Courier* containing accounts of interviews with various medical men in Brisbane with regard to the prevalence of lead poisoning in children arising possibly from drinking water collected in galvanised iron tanks, be sent to the editor of the *A. M. Gazette* so that the attention of medical men in other colonies be further directed to a preventible disease where similar conditions may prevail.”

Report of the 60th general meeting of the Queensland Branch of the British Medical Association, held in their rooms on Friday, 6th May, 1898.

Present: Dr. Francis (Vice-President), Drs. Taylor, Marks, Orr, Halford, the Hon. Secretary Dr. Jackson.

Dr. HALFORD read a note, and exhibited specimens of—(1) *Trichina spiralis* distributed throughout the muscle substance of a patient operated upon for Epithelioma of the floor of the mouth. (2) A specimen showing bacilli in the perivascular lymph spaces of a branch of the lenticulo-striate artery in the right globus pallidus causing thrombosis and left hemiplegia in a case of septic meningitis. (3) A heart showing atrophy of right cavities and a preponderance of fat over muscle substance in the right ventricle. The walls were less than one-sixth of an inch in the thickest part. The patient succumbed to heart failure while struggling during administration of chloroform. Respiration failed a minute or a minute and a-half after pulse had been imperceptible. Reflexes present up to the last. (4) A method of demonstrating the ataxia in the early stages of locomotor by moving the hand round in a circular fashion before the patient's face. By this means all idea of place or position is at once lost, and he loses his equilibrium. He regains this at once the

moment the hand is brought to a standstill and becomes a fixed object.

The ordinary monthly meeting of the Queensland Branch of the British Medical Association was held in their room on Friday, June 3rd, 1898.

There were present:—Dr. Connolly (President), Drs. Molony, Orr, Marks, Taylor, Francis, Halford, Brookway, and Jackson.

Dr. HALFORD exhibited a specimen of epithelioma of the penis, and one of thrombosis of the pulmonary artery.

Dr. ORR moved.—“That copies of the *Brisbane Courier* containing accounts of interviews with various medical men in Brisbane with regard to the prevalence of lead poisoning in children, arising possibly from drinking water collected in galvanised iron tanks, be sent to the editor of the *Australasian Medical Gazette*, so that the attention of medical men in other colonies be further directed to a preventable disease where similar conditions may prevail.

Dr. MARKS seconded the motion.

In the discussion which followed, the ethical side of the question assumed a prominent position, and it was asserted in effect that the men interviewed had allowed themselves to be so with no other object than that of self advertisement.

Dr. ORR's motion as it stood did not find favour with the meeting, so that, at the request of the meeting, Dr. MOLONY gave notice that at a special meeting a fortnight therefrom, he would move,—“That the medical men who were recently interviewed by the *Courier* representatives were not justified in allowing the results of such interviews to appear in the *Brisbane Courier*.”

Dr. MARKS then moved,—“That the Home Secretary be asked to define what examination is necessary for Civil Service and Factories Act by medical men.” He stated that it had come under his notice that a large number of cases had been put through by a medical man in a very short space of time—twelve in 30 minutes, for example. The fee charged for examination of children under the Factories Act was 2s. 6d., and this was apparently laid down by regulation by the last Home Secretary. Similar regulations laid down that an examination, in his opinion equal to that of the insurance companies, should be made. Such an examination could not be made in a few minutes, and if it were really required should be made; and if the fee of 2s. 6d. were not sufficient to pay medical men to do it well they should not undertake it. He submitted the regulations referred to. If the authorities did not really want such a searching examination as was implied by the certificate form already in use, then a modification of it might be perhaps suggested. Dr. Marks then suggested a form which might serve the purposes of the Act, and which he thought might entail a less examination—an examination, in fact, which might be looked upon as nearer 2s. 6d. in value than the present.

Dr. TAYLOR said that it was, perhaps a kindly motive that actuated the Home Secretary when he fixed the fee under the Factories Act at 2s. 6d. It is perhaps as much or more than the children examined can afford to pay. The fact is that he, the Home Secretary, found doctors to take these fees, and he probably thought that sufficient justification of them. But, as to “justification,” if it had been charity which had been the object of those who accepted them it had been better if they had done it for “no fee.” The question is whether it is worth a man's while to examine at those fees. The insurance companies if they found out that examinations as good as those they asked were being made for 2s. 6d. would say, “why should they pay \$1 ls. when they can get the work done for 2s. 6d.”

Some time ago we were discussing the question of boycotting the Friendly Societies' doctors for taking low fees, and in addition signing a "degrading" agreement. He thought that the doctors who take these 2s. 6d. fees were even more to blame. Either the examination should be good or not made at all. It was not honest to do otherwise. It is preposterous to say that 2s. 6d. is adequate remuneration for an examination which should be as thorough as for an insurance certificate.

Dr. ORR agreed with what Dr. Taylor had said, that it was not honest to make the examination unless it were thorough. He thought it could hardly be worth the while of medical men to make the examination for the price.

Dr. BROCKWAY thought that there was a point of view that was being forgotten, viz., that of the struggling practitioner who perhaps found that a sufficient examination could be made in, say, a quarter of an hour, and that if he could make four in an hour that he was as well paid as he needed. Those who were established in practice might find the fee inadequate, but another class might find, if the examination required were not too searching, that it paid to make it at 2s. 6d.

Dr. MOLONY wondered what right the Home Secretary had to limit this work, or in laying down what fee should be paid for it, or in determining that it should be given to five particular practitioners, and wanted to know why every one was not given a chance of doing some of it. He considered it was an injustice.

Dr. DENNIS remarked that the examinations in question amounted to consultations, and therefore should carry the same fee.

Dr. CONNOLLY said that there were two sides to this question, and he was prepared to admit that he had taken the 2s. 6d. fees. He had been asked by the Chief Inspector under the Factories Act if he would examine. He declined to allow his name to be, in any way, advertised about it. Dr. Molony was in error if he thought that the names of any five practitioners had been singled out for the privilege of examining under the Act. Any doctor might examine, and he would be willing to give the work that he did in this connection to any other. He, himself, had been told the names of the other men examining in the same way and he thought that what they did he could do also, since they were good men in their profession. As to examination, if he found it necessary on inspecting them he put a stethoscope to them; if they were ruddy and healthy looking he did no more than look at them. In any case he looked on the examination as an utter farce. As to examinations made for the civil service, he had made a good many and used to take trouble over them till on one occasion he had rejected a lad with "blue disease," from congenital heart disease. He was afterwards passed by a doctor on Wickham Terrace. Then, again, a man whom he had rejected because of a heart murmur went away and got passed by another doctor. Other cases went to a practitioner whose reputation he knew to be bad, and were passed. The consequence was that he (Dr. Connolly) now took less trouble and put the examined ones through rapidly. He would like to see two doctors appointed as a board to examine for the Civil Service, and a proper examination made and a proper fee paid for it.

Dr. JACKSON said that he did not see any great reason for Dr. Molony's expressed anxiety that the favour of being allowed to examine for the fees mentioned should be extended to more members of the profession. He thought Dr. Connolly's arguments for altering the

quality of these examinations about the worst he had ever heard.

Dr. FRANCIS thought there was one very good reason for passing Dr. Marks' motion, if it were only to save the five doctors under the regulations from themselves. From Dr. Connolly's speech it would almost appear that he was arguing that it was right to lend his signature to anyone for 2s. 6d. Anyone who signed the regulation certificate without a thorough examination did not value his word. It explicitly states "I have this day examined _____, and I hereby certify that _____ is sound in constitution; is now in good health, and has no physical defects."

Dr. HALFORD had much pleasure in seconding Dr. Marks' motion.

Dr. Marks' motion being put to the meeting was passed unanimously.

Dr. Taylor's paper on "Chloroform Syncope" was postponed owing to the lateness of the hour.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Branch was held in the Royal Society's Rooms, on Friday, 27th May, 1898, Dr. W. Chisholm (President) in the chair. There were also present: Drs. Hinder, Wilkinson, Crago, Mullins, Bennie, Furnival, Fiaschi, Flynn, West, Lillie, Foreman, Jamieson, Eichler, Quaife, Macdonald Gill, Gledden, F. W. Hall, Goode, Traill, A'Beckett, McCarthy, Binney, Menzies, Sawkins, Gordon MacLeod, Dagmar Berne, Clubbe, Tidswell, Worrall, MacLennan, Abbott, McMurray, Power, Thring, Gordon Craig, Neill, Magnus. Visitor—Dr. Sinclair Gillies.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the election of Dr. F. Magnus, of Sydney, and Dr. Wm. Cumming, of Woonona, as members of the Branch. Nominated for election—Dr. R. A. Robinson, of Coolamon.

The PRESIDENT stated that the first business was the resumption of the discussion on Dr. Wilkinson's paper. Remarks by Dr. Tidswell, see page 265.

Dr. LILLIE said Dr. Wilkinson in his paper, read before the last meeting, if he (Dr. Lillie) remembered rightly, said that he had used the new tuberculin with good results, and that the temperature of feverish patients decreased after injections. If this is so, it would be something very extraordinary and remarkable. Because Koch himself says, in introducing the new tuberculin, that it should not be used when the patient had fever. It should be discontinued when it would produce rise of temperature, and one should wait until the temperature was normal again, and then a smaller dose than the original one should be given. Those rules were again laid down in a discussion about the use of tuberculin in Berlin in March, 1898, by Professor Briezer and Dr. Marx, both directly working under Koch. The first words again are here, that the tuberculin should not be injected when the temperature is above normal. The reason why it should not be done was that in most of the more advanced cases of tuberculosis a mixed infection already exists—mostly streptococcus were associated with the tubercle bacilli. Good results had been shown in early cases, and in such of tuberculosis of the skin (lupus). In the Congress of Moscow the authorities had not seen any remarkable success from the tuberculin, and all advocated climatic treatment. He believed we had to be very careful in recommending the treatment with tuberculin injections. When the disease could be proved by auscultation and percussion it was in general too far advanced for tuber-

culin treatment and the microscope pus to be used more frequently to find the commencement of tuberculosis.

Dr. EICHLER said he should like to say a few words in reference to the treatment of tuberculosis and of lately discovered serums. At the International Congress held at Madrid on the 9th April there were present twenty-two German representatives, most of whom were professors, and among them were men such as Behring (of Berlin), Loeffler, Koehler, Stahl, Rubner, Pannwitz, &c. Many exhibits were brought forward, and especial interest was centered in those of Schering, Dr. Graf and Co. At this same meeting a great sensation was produced when Professor Behring delivered an address upon the value of his new tuberculin, called "Heilserum," in cases of advanced tuberculosis. He (Dr. Eichler) would like to digress a moment to say that a new albumen was also shown at the congress. This albumen was a discovery of Professor Finkler, of Bonn University, and was an artificially prepared one. In his own words he ventured to assert that it would produce a complete revolution in the human diet. This albumen he called "Tropan." Dr. Paul Frank, of the Poor Asylum in Berlin, also spoke favourably of this substance, and noted that its production was both cheap and chemically pure. Referring to the *Sydney Morning Herald* of May 25th, the following little interesting paragraph might have escaped your notice, and he would therefore take the liberty of mentioning it. Quite recently Dr. Marmorek, a young Vienna scientist, at present engaged at Pasteur's Institute in Paris, delivered a lecture about a new serum, to which he attached his own name, "Marmorek Serum." It was originally used in cases of puerperal and scarlet fevers. Dr. Buchanan also spoke of the success of this serum, and mentioned some interesting experiments with the serum which he himself had carried out. He noted its value in certain rheumatic conditions, in which a few injections sufficed to remove painful joint affections and other rheumatic manifestations. Since then it has been employed with success in asthma and other diseases, and it would appear that ten injections sufficed to prevent a relapse. He (Dr. Eichler) was very favourably impressed with the results of the new tuberculin treatment, but his own experience had been with other remedies, such as the old and certainly valuable treatment by Guaiacol carbonate, change of climate, etc., and lately he had been astonished at the results obtained with creasotal. This, of course, was quite a recent preparation and sufficient time had not yet elapsed ere we could assert its value in all cases of tuberculosis, but in one case which he would like to mention he noticed decided improvement in the course of three weeks. The patient lost his night sweats, and improved in almost every other way. His appetite returned, and his weight increased just short of eleven pounds.

Dr. WILKINSON replied.

Dr. CLUBBE read notes on five cases of laparotomy for perforation of hollow viscera. (See page 231.)

Dr. HINDER said he congratulated Dr. Clubbe on the great success which had attended his treatment, for the great mortality attending rupture of the abdominal viscera was well known. In connection with these cases he would like to make brief mention of four cases of perforated gastric ulcer which had come under his notice. No. I. was a woman, a patient of a fellow medical man who was admitted with history of sudden pain and vomiting, but, who, though showing localised tenderness in the epigastrium, had a pulse of 100. However, acting as he deemed for the best, he opened the abdomen and found the stomach ad-

herent to the abdominal wall and directly he separated the adhesions the stomach contents poured out into the peritoneal cavity; the opening was attended to, but the woman died in three or four days. Probably she would have lived had she been left alone. No. II. was a woman who directly after dinner was seized with sudden pain while at the wash-tub. She was doubled up completely, and was put to bed. She was seen four hours afterwards, and though she had a localised epigastric peritonitis, and had vomited three or four times, her pulse was only 90 to 100. After consultation with Drs. Blaxland and Traill it was decided to leave her alone. She recovered. No. III. was a patient seen by himself and Dr. McCarthy. This patient, a woman of 26, gave a history of sudden pain shortly after a meal, and confinement in bed with feverishness, etc., for the intervening three weeks. There was a localised patch of epigastric dullness, and a temperature of 100 to 103deg., with sweats. The dull area was cut down upon, and a rounded cavity containing pus was opened into and drained. It held about a pint of pus. The patient was well in three weeks. The cavity was certainly not hydatid. No. IV. was a patient who was seen in consultation with Dr. Rennie. She had a five-years' history of pain and passage of pus, etc., per rectum, on two or three occasions. In the ninth interspace and mid-axillary line was a puckering of the skin, hard and firm, but it had never broken. The patient was anxious for relief, and a solution of her difficulty. A diagnosis of perforated gastric ulcer was made with adhesion to the chest wall. The abdomen was opened and a patch of the wall of the stomach the size of a 5s.-piece was found adherent at a spot corresponding with the puckered external surface. These cases are of interest, as showing the course perforated gastric ulcer may take, but not by any means to encourage any one to neglect acting upon the more decided symptoms—perforation—a diffuse soiling of the peritoneal cavity with the contents of the stomach.

Dr. FIASCHI said with regard to the first case mentioned by Dr. Clubbe no doubt the suggestion that there must have been a small ulcer at the place of rupture was correct. In the second case, where on opening the abdomen an escape of gas was found, and where there was evidence of perforation, a good plan to locate the perforation was to fill up the abdomen with water and so trace where the gas was escaping. He felt much indebted to Dr. Clubbe for his interesting and instructive paper.

Dr. FOREMAN said he had listened to Dr. Clubbe's paper with interest, and also to Dr. Hinder's remarks about the four cases he had dealt with. There could be no doubt that a great many cases of gastric ulcer got well without any interference, if the contents of the stomach got into the abdomen there would of course be more or less mischief. He (Dr. Foreman) would like to ask if in any of Dr. Clubbe's cases did he find the contents of the stomach in the abdomen.

Dr. WORRELL said Dr. Clubbe's cases were a credit to Australian surgery. They would have this value. They would serve to direct the attention of practitioners to the comparative frequency of this accident, and thus secure for these cases that early surgical interference which was the chief factor in their successful treatment. He desired to emphasize the importance of that procedure adopted by Dr. Clubbe in his last case, viz., the additional incision below the umbilicus and insertion of a glass drainage tube. They all knew how fluids tended to gravitate into the pelvis, and therefore it was of great service—especially when flushing had been resorted to—to obtain in this way adequate

drainage. He agreed with Dr. Hinder that recovery might take place spontaneously after perforation of the stomach, especially when the organ was empty, but the very remote probability of spontaneous recovery did not justify one in withholding operation in such cases.

DR. CHRISHOLM said he had had the opportunity of seeing one of the cases mentioned. The symptoms seemed so clear that he was sure of finding a perforation, and when the opening had been made and the perforation could not be found, he certainly felt disappointed; however, the *post mortem* examination showed that the perforation was too high up to be discovered while the patient was alive. He thought Dr. Clubbe was to be congratulated as one of the pioneers in such operations, as well as in the operation for intussusception.

DR. CLUBBE said there was no free gas in the abdomen in the first case mentioned; he squeezed the intestines to try if there was any hissing noise made by the escaping gas so as to point out where the perforation was. There was no escape of the contents of the stomach into the abdominal cavity. A large number of cases of gastric ulcer get well without interference, because he believed a large quantity of lymph was rapidly formed sufficient to surround the perforation and so localise it. It was a curious fact that all, or nearly all, the perforating ulcers appeared on the anterior wall, while the gastric ulcers were most frequently found upon the posterior wall.

DR. HINDER read some notes on four cases of prostatectomy. (See page 234.)

DR. GORDON CRAIG read some notes on a case of prostatectomy. (See page 237.)

DR. LILIE said he had read of an instrument used by Dr. Bottini, of Italy, in such cases with wonderful results. The instrument was like an electrical cautery—the operation is performed without chloroform. Perhaps Dr. Fiaschi knew of the instrument.

DR. FIASCHI said he did not know the instrument mentioned by Dr. Lilie, but he had always had an idea that the use of this instrument required great skill in handling. The operation described by Dr. Hinder was one which could be done by sense of touch.

DR. CHRISHOLM said he had to congratulate Dr. Gordon Craig upon his first paper read before the Branch. It was pleasing to note that the graduates of the Sydney University were carrying on surgery in its latest methods.

DR. HINDER said in reply to Dr. Lilie that he did not think that Dr. Bottini's method could be very well applied to all cases, though the results reported were certainly marvellously good; and to Dr. Fiaschi he wished to state that the tubes were of service in smaller prostatic growths, and in isolating delicate villous growths, &c., so that a more complete removal could be accomplished under visual examination. The efficacy of the glass-ended tube for examination of the bladder wall before and even after operation was undoubted.

DR. GORDON CRAIG said that the instrument used by Bottini had not altogether been satisfactory. In one or two cases the older methods had to be adopted even after the instrument had been tried.

DR. TIDSWELL said he agreed with Dr. Wilkinson as to the desirability of making some effort to combat tuberculosis. The practical difficulty was the magnitude of the matter. Something in the way of educating the community was contemplated by the Health

Department; indeed, he might state that the matter had occupied the attention of the authorities for some time past. As regards tuberculin, reports did not permit of final judgment. He had gathered from Professor Koch's description that the essential difference between the old and new tuberculin was that whilst the former was anti-toxic only, the latter was both anti-toxic and germicidal. It did not seem to him that T.R. could be regarded as an anti-toxin similar to the anti-toxins of diphtheria or tetanus. It was rather comparable to the toxins of these diseases, and in using it the idea seemed to be to immunise and not cure in the ordinary sense. Of course the ultimate result was the same. If immunity could be produced the patient was cured. There was no doubt animals had been immunised with T.R.; but not all animals. So it was not to be expected that the new tuberculin was going to cure every consumptive. Koch himself scrupulously avoids employing the word cure, and talks of amelioration. No doubt an important advance had been made, but the earnestly desired goal had not yet been reached.

PROCEEDINGS OF OTHER SOCIETIES.

NEWCASTLE MEDICAL SOCIETY.

A SESSIONAL meeting of the Newcastle Medical Society was held on 21st April.

Present: Dr. Beeston, in the chair; Drs. Harwood, Hester, Ayres, Dunlop, Eames, Horsfall, Harris, Ludlow, Dick, and Nickson, Hon. Sec.

DR. BEESTON opened a discussion on puerperal eclampsia.

The discussion was continued by those present.

A sessional meeting of the Newcastle Medical Society was held on May 12th at the hospital.

Present: Dr. Beeston, in the chair; Drs. Eames, Dunlop, Dick, McDouall, Ayres, Ludlow, Harwood, Bean, Horsfall, and Nickson.

DR. DICK read a most interesting paper, entitled "Antisera, with Special Reference to Diphtheria Antitoxin," in which he described the preparation of antitoxins, and gave the latest views on their relative value.

The paper was illustrated by a very complete set of photographs.

BALLARAT DISTRICT MEDICAL SOCIETY.

THE ordinary Quarterly Meeting was held on April 28. Present:—The President (Dr. Salmon), Drs. Cassen, Gardiner, Adam, Morrison, Robt. Scott, Usher, Wilson, and Mitchell (Hon. Sec.).

Apologies were received from Drs. Jordan, Pinnock, Guthell, Richards, Beattie Smith, Miller, and Courtney.

The PRESIDENT laid upon the table the balance-sheet in connection with the Whitcombe Memorial Fund, and reported that the grave had been surrounded by a neat stone kerb surmounted by an iron railing, and bearing a slab with the words, "Erected by his medical friends in affectionate memory of William P. Whitcombe, M.R.C.S."

The balance-sheet was received and adopted.

Accounts amounting to £4 18s. 9d. were passed for payment.

Dr. T. A. WILSON read a paper on "The Etiology of Infection" which will appear in a future issue.

Dr. SCOTT congratulated Dr. Wilson, and quoted a very similar case lately under his care in the Ballarat Hospital.

Dr. USHER scarcely agreed with the classification adopted by the writer on the ground of latest discoveries and theories.

Dr. J. MORISON GARDINER read notes on a "Case of Aortic Disease with Embolism" (see p. 252), and showed a well-prepared exhibit of the vessel and surrounding tissues. He also read notes on a "Case of Cerebral Abscess" (will appear in a future issue), which attracted considerable attention and evoked the interest of the members present.

The Sub-committee handed in its report of negotiations with the Victorian Branch of the British Medical Association with respect to the amalgamation of this Society as a District Branch of the Victorian Branch, and its recommendation, "That this Society resolve itself into a District Branch under the auspices of the Victorian Branch of the British Medical Association."

Dr. MORRISON moved, and Dr. ADAM seconded, "That this Society adopt the recommendation of the Sub-committee." This was carried unanimously, the following members having sent written approval of the change—Drs. Miller, Pinnoek, Guthrie, Richards, Courtney, and Beattie Smith, while there was no dissentient.

A vote of thanks to the chair closed the meeting.

OTAGO INSTITUTE, DUNEDIN, N.Z.

THE FIJIAN FIRE CEREMONY.—There was an interesting discussion at the last meeting of the Otago Institute, Dunedin (N.Z.), on May 14, on the fire ceremony in Fiji. Drs. Hocken and Colquhoun, of Dunedin, have just returned from a trip to the islands, and while there they had an opportunity of watching the ceremony, which was described by Dr. Hocken. The ceremony is now seldom performed, and the power, so far as Fiji is concerned, appears to be confined to a family resident on Mbenga, an islet lying twenty miles south of Suva. These people, almost nude and with bare feet, walk quickly and unharmed across and among the stones, made white-hot, forming the pavement of the cooking oven. An attempt was made to register the heat, but when the thermometer had been placed for a few seconds about 4 ft. or 5 ft. above the stones it had to be withdrawn, as the solder of the tin covering began to melt. The thermometer then registered 282°, and Dr. Hocken estimated that the range was over 400°. The fire-walkers, seven or eight in number, then approached, and in single file walked leisurely across and around the oven. The leader was a second or two under half a minute on the stones. The heaps of the soft and succulent leaves of the hibiscus were thrown into the oven, causing clouds of steam, and upon the leaves and within the steam the natives sat or stood. The men were carefully examined by the two doctors, both before and after the ceremony. The fire had not affected the simple articles of dress they wore. The soles of their feet were not thick or leathery. The men showed no symptoms of distress, and their pulse was unaffected. The soles of the feet were not in the least blistered. Simple tests made failed to show that there had been any special preparation. Both doctors, while denying anything miraculous about the experiment, expressed themselves unable to form any scientific explanation of the matter.

MEDICAL SECTION, ROYAL SOCIETY OF TASMANIA.

THE usual monthly meeting of the Medical Section of the Royal Society was held on May 4th, when the following members were present:—The President (Dr. Bright), in the chair; Drs. Clarke, Giblin, Butler, Barnard, Macgowan, Crouch, Wolfhagen, Walch, Scott, Jamieson, and Sprott.

Dr. Calvert was present as a visitor.

Drs. Alsop, Anderson, Drake, and Ireland were unanimously elected members of the section.

After some formal business had been disposed of Dr. Macgowan read "Notes of a Case of Intussusception."

NOTES OF A CASE OF INTUSSUSCEPTION.

By E. T. MACGOWAN, M.B., B.Ch., MELB.;
RESIDENT MEDICAL OFFICER, HOBART
HOSPITAL.

THE patient was a female infant aged seven months. She was brought to the hospital about 8 a.m. on November 29th last, by the mother, who stated that the child was perfectly well on the previous evening when put to bed. About 3 a.m. she woke up and screamed; later on she vomited freely, and the mother noticed the child had passed some blood by the bowels. The vomiting had continued at intervals. When first seen (viz, 8 a.m.) the child was in a state of collapse. On palpating the abdomen, a sausage-shaped tumour could be made out in the left iliac region, and per rectum an intussusception could be plainly felt. The bowels had acted normally the previous afternoon. Reduction was tried by inflating the bowel with air, but was unsuccessful. The child was then admitted to hospital and seen by Dr. Bright, but as she was then very collapsed he decided to wait, giving a sedative to allay vomiting and peristalsis. During the night the child rallied somewhat; she was given breast milk regularly but vomited several times after taking it. In the morning (30th) the child appeared much brighter. The vomiting and passage of blood, however, still continued at intervals, and later in the day Dr. Wolfhagen saw the child with Dr. Bright. Inflation of the bowel with air was again tried, but as this was unsuccessful, laparotomy was deemed the only resource. This was done by Dr. Bright at 4 p.m., 37 hours after onset. Under ether the abdomen was opened over the site of the tumour in the left iliac region, the intussusception was readily found, and, after some difficulty in starting, it was successfully reduced. After reduction the bowel presented a swollen and deeply-congested appearance; it was carefully washed with sterilised water, and

returned into the abdomen. The abdominal wound was closed and iodoform gauze dressing applied. The child rallied well after operation, and passed some flatus and a small blood-stool. She seemed much easier and quieter, and was given peptonized milk and brandy per rectum. About 2.30 a.m. next day, December 1, the child suddenly collapsed, and died at 3.15 a.m.

There was not less than nine inches of gut strangulated in the intussusception, which had apparently started at the ileo-cæcal valve, and then, swallowing the lower portion of the ileum, had also included the cæcum and vermiform appendix.

The case is noteworthy as it showed the futility of any of the methods usually employed for reducing an intussusception, viz., insufflation and enemata. The bowel was so tightly invaginated that it could only with difficulty be reduced, even when fully exposed.

Another point of interest to me, if the mother's statement be correct, is the early occurrence of collapse, five hours after the onset of the disease.

In the *Lancet* of August 28th, 1897, is an article by Dr. F. Holme Wiggin, of New York, on infantile intussusception and its treatment by enemata and laparotomy. He is of opinion that laparotomy will be the *par-excellence* treatment of infantile intussusception in the near future.

In the *Australasian Medical Gazette* for November, 1897, two cases are reported by Sydney C Godfrey and J. Lewis Read, of New Zealand. These gentlemen also are of opinion that laparotomy, if performed early, i.e., within, 48 hours of the occurrence of the intussusception, will greatly reduce the mortality of this disease.

DISCUSSION.

Dr. BRIGHT said the reason he had not operated sooner was because of the extreme collapse. No means short of laparotomy was of any use.

Dr. WOLFHAGEN said he was surprised the child had lived so long on account of the vast amount of gut invaginated.

Dr. GIBLIN said that Mr. Hutchinson always reduced his cases of intussusception by inversion and taxis, and had only operated once in his long experience. The treatment was usually successful within three-quarters of an hour. He was desirous of knowing the experience of other members of the Section.

Dr. SCOTT said he had done a P.M. on a child of seven months who had died suddenly, and found the cause of death to be invagination of bowel.

Dr. JAMIESON had treated a case successfully by placing the child in Trendelenburg position and using taxis; the child was one year old.

NOTICES.

All communications intended for publication may be addressed "The Editor, *Australasian Medical Gazette*, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAUGS, SYDNEY, N.S.W.:
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
M. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH JUNE, 1898.

EDITORIALS.

MEDICAL CO-OPERATION.

PROPOSED MEDICAL INSTITUTE FOR BRUNSWICK.

THERE has been recently set on foot in Brunswick and Coburg, Vic., an agitation having for its object the establishment of a medical institute on lines similar to that at Bendigo. The local branch of the Australian Natives Association

were the first to move in this matter, and by their instrumentality several conferences of the friendly societies of both districts have been held. A sub-committee was appointed to formulate a scheme, and at a largely-attended conference held last night the following scheme was adopted:—

"1. That the present scope of the United Friendly Societies' dispensary be extended so as to embrace a medical institute, giving medical advice in addition to medicines.

"2. That in order to more effectually carry out this extension the present locale of the dispensary be removed to some more convenient spot, and with sufficient accommodation for doctors' consulting rooms.

"3. That upon a sufficient number of members joining the proposed institute, one or two doctors, at a salary of £450 per annum each, as the case requires, be secured to attend to members only.

"4. That as an inducement to medical men to offer their services the appointees be allowed to attend the wives of members in accouchement cases.

"5. That for the first 12 months the sum of 12s. 6d. per member be charged as the fee for medical services.

"6. That in order to carry the movement to a successful issue the lodges of Brunswick and Coburg be invited to co-operate with one another in establishing the institute.

"7. That the present dispensary committee, together with one additional member from each of the lodges forming the institute, be the managers of the combined institutions.

"8. That the said committee, when fully constituted have the like powers of management at present conferred on the dispensary committee.

"9. That district accounts be kept of the working of the medical and dispensary departments.

"10. That as soon as 1,000 members or more signify their willingness to join the committee be brought together, and the condition of clauses 2 and 3 be brought into operation."

Mr. J. Hume Cook, M.L.A., is the secretary of the conference.

MEDICAL OFFICER FOR FRIENDLY SOCIETIES.

Applications are invited from duly qualified medical men for the POST of SURGEON and PHYSICIAN to the Clermont Associated Friendly Societies' Medical Institute.

The number of members in the Institute is about 190, and increasing. The rate of payment is 6d. per member per week.

Private practice is allowed, and the district is rapidly rising in importance, being a flourishing gold-field.

THE above advertisement, which is typical of a large and rapidly-increasing class, may serve as a text for a timely warning to the profession. Ours is an age of unionism. It may not only be conceded, but fairly claimed, that this extension of the principle of co-operation works on the whole for good, and is a sign of progress. But, just as eternal vigilance is the price of a satisfactory democracy, so equal recognition of

the rights of others is a *sine qua non* of lasting progress.

What, then, should be the attitude of our profession in the face of such extensions of the principle of unionism as is manifested in the above advertisement? It is irrational as well as futile to deny the public the right of uniting together for the purpose of securing medical aid to themselves and families. There is no divinity that hedges round the doctor; on the contrary, he, more perhaps than any other, is the servant of the public. It is unwise, also, to assume that matters will right themselves, at any rate within a reasonable period; on the contrary, all knowledge of human nature and all experience from past history unite in declaring, as with one voice, that at our present stage of development the strong will go beyond their deserts, unless the other side can make the "tug-of-war" more or less of a drawn battle; and until altruism has dethroned egoism, and our race as a whole has reached a plane of development now visited only by the few, it is only strength on both sides that will keep the vessel on an even keel, and bear her to a satisfactory haven; and, in view of the numerical combination on the side of the public, it is worse than useless to expect the profession, individually, to obtain that equality in results which should be the ultimate outcome of all such friendly contests.

If, therefore, the profession desire to obtain a satisfactory settlement of this great problem of mutual medical benefit, they must follow the example of all other bodies who have raised and elevated their position. They must co-operate and combine "not for defiance but for defence," as appears on the flag of the trades unions. For, to the ordinary practitioner, at all events, there is a trade side and a market value to his professional services. He, too, has to live, and like others deserves a fair wage. Already, steps in this direction have been taken here, as well as in the Old Country, and concessions won from popular selfishness and thoughtlessness; but we are only, as a profession, at the beginning of the fight.

That success may attend our united action, two things are certainly essential. In the first place, the profession must be far more united and earnest in this matter than it has hitherto shown itself to be. With some it is a matter of life and death; with many, it is a question of comparative comfort or progressive slavery; with the fortunate remainder, it is an issue involving professional rights, and the honour of a noble and deserving calling. To all, therefore, we say, and say with all earnestness, join

yourselves to the Medical Defence Association of your colony, or, if no such body exists, take steps to form one without delay, and give it your cordial support. Help it with your counsel as well as your subscription, so that, whenever a compact has to be entered into, your side shall, like the other, be strong and resourceful.

The second essential is that our demands be just. Here it is that are needed the wise heads, the Nestors of our profession. Let us but show that, in addition to a union amongst ourselves that is practically all-embracing, we are also fair and just in our requirements, and the equitable settlement of differences, which is born of strength and justice, will follow. Let, therefore, the different Defence Associations formulate what, in the opinion of the profession, are the requirements from the medical side. When their members enter into contract with medical benefit bodies, let them see to it that they are fair to both sides. Then let them seek the support of a united profession and bring their legitimate influence to bear upon every contracting occasion. We reserve for future discussion what we hope all our readers will agree in regarding as a satisfactory basis of contract.

THE "MEDICAL PRESS" AND IRREGULAR PRACTICE IN NEW SOUTH WALES.

OUR contemporary, *The Medical Press and Circular*, professes to have derived considerable diversion from our remarks on irregular medical practice in New South Wales in February last. We then suggested that the Editor of the *Press* should consult the report of the Select Committee appointed by the Legislative Council in 1887, a copy of which might be seen in the Library of the Colleges of Surgeons or Physicians in London. *The Medical Press* appears to be above "blue books bearing upon the subject." Possibly, the Editor considers himself too well informed to soil his hands with books of reference. This may account for his having suggested, in January last, that the profession in *South Australia* should meet and draw public attention to the scandal in *New South Wales*. The despised blue books would have pointed out this error had they been consulted. The *Press* writer speaks of the "jaundiced view taken by an editorial writer in the *Australasian Medical Gazette*," and then attempts to show that our opinions and his own are identical. We do not recog-

nize the identity of the two ideas. The *Press* suggested a meeting of the profession; we advised a combination of the medical societies. These two suggestions are not identical. The *profession* contains a large number of qualified blacklegs who, for a few shillings, would drag down their *confrères* to their own level; some qualified quacks who "remove obstructions," some graduates of extinct or bogus foreign universities, and such like. The *Medical Societies* contain none of these. How, then, can the London journal make the statement that the profession and the medical societies are identical?

But really our contemporary's arguments are frivolous, and we cannot waste further time.

LEAD-POISONING IN QUEENSLAND.

WE are glad to see that the Government of Queensland has been induced to take up the matter of enquiry into the cause of those cases of paralysis, and other disablements, which have been attributed to this cause. The appointment of a Board of Enquiry with the Hon Dr. Taylor as chairman, is a step in the right direction. That the list of disablements referred to is sufficiently heavy, will be readily understood on perusal of the able papers of Drs. Gibson, Turner, and Green, in the *Australasian Medical Gazette*, of October 20th, 1897.

If lead be the cause of all the troubles described in those articles, it will probably be easy enough to trace it to its source. It is noteworthy, however, that the Government Analyst, Mr. Henderson, states that he discovered lead in only three out of many specimens of water, used by the patients submitted to him. All the samples of tank water examined, contained zinc however, so that the Board, in pursuing their investigations, must not entirely lose sight of this metal as a possible contributor. It is a significant fact in favour of those who have made up their minds, that lead is the chief factor of causation, that that metal has been found in the urine of some of the cases. It has not been determined what effects, if any, are produced by the long-continued consumption of water, impregnated with zinc salts.

Whether the troubles are to be referred to either of these metals, or to something else, is what the Board has to determine. It is to be hoped, that the members of the medical profession throughout the northern colony, will loyally co-operate to hunt down the cause of so much disaster to little children. If tank water be

proved to be the source, then steps must be taken to improve the reservoir water supplies, a difficult and expensive matter in a warm or tropical climate.

THE ROYAL ARMY MEDICAL CORPS.

THE *British Medical Journal* for May 7th announces the inauguration of this long-asked for reform. In this corps, medical officers will bear the same military titles as other army officers up to that of colonel. Above that rank the title will be surgeon-general, with the rank and precedence of a general officer in the army.

In granting this reform, the Home Ministry, through the Secretary of State for War, has removed one of the grievances of the medical profession. Lord Lister, in approving of the measure stated "that Lord Lansdowne had removed a terrible cloud from the medical profession and a terrible evil from the nation." The British Medical Association may justly claim a large share of the credit of this result, and we heartily join with the parent journal in hoping that the olive branch so gracefully offered by Lord Lansdowne will be as gracefully and loyally accepted by the profession and by the army.

PROSECUTIONS UNDER THE HEALTH ACT, VIC.

THE prosecution of a medical man in Ballarat (*vide* p. 274) for not having notified the health authorities of a case of typhoid which he had attended raises the general question of the notifying of diseases, and the dismissal of the case by the Ballarat Bench cannot be understood by the Chairman of the Board of Public Health (Dr. Gresswell), nor by any other scientific mind. Ballarat has been proclaimed by the Board for typhoid fever, and, of necessity, that proclamation carried with it the necessity for notification by medical men of every case of typhoid coming under their care or attention. The reason is obvious, and it is much to be regretted that there should be any doubt in the minds of the Bench as to the duty of medical men under the circumstances.

The Hon. Librarian, N.S.W. Branch, B.M.A., requires *The Lancet*, No. 3,866, October 2, 1897, to complete series. He would be glad to receive this number, addressed to 121 Bathurst Street, Sydney.

LETTERS TO THE EDITOR.

"METAMORPHOSIS OF FILARIA SANGUINIS HOMINIS."

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—I am anxious to learn what has been done on the above subject since the publication of Cobbold's "Parasites of Man and Animals," May, 1879; and of Manson's "The Filaria Sanguinis Hominis," June, 1883.

Situated as at present I have no opportunities of consulting libraries, and should be extremely obliged were any of your readers also to give answers to the following questions:—

(a) Has anyone in Australia proved, or made an attempt to prove, Manson's Filarial Metamorphosis?

(b) With the exception of the embryos of Filaria Bancrofti i.e., Lewis's Filaria sanguinis hominis, have any of the other embryo-filariæ described by Manson in the *British Medical Journal*, December 25th, 1897, been seen in Australia?

Recently I have been working at the "Life History" of Filaria Bancrofti and Filaria immitis, and have been able to verify some of Manson's statements regarding the former; up to date the following observations have been recorded:—

I. Metamorphosis of Filaria sanguinis hominis takes place in the muscles of the thorax of two species of mosquito, viz., *Culex ciliaris* and *Culex vigilax*.

II. Upon the death of the mosquito the young filariæ do not escape from its body into water and therein live a free life, as Manson and others thought, but they invariably die.

III. Those embryo-filariæ, which are destined to develop, leave the stomach of the mosquito at an early date and take up their abode in the muscles of the thorax. After the meal of blood has been digested, the stomach and even the abdomen is free from filariæ.

IV. The young filariæ live a day or two after the death of the mosquito, but should the latter fall into water they die immediately.

Possibly infection results by swallowing mosquitoes (which have imbibed filarial blood) one day or so before or immediately after their death, which usually occurs six days after they have sucked blood.

I am, Sir, yours, &c.,

THOS. L. BANOROFF.

Burpengary, Queensland, May 28th.

ANÆSTHESIA IN DENTAL OPERATIONS.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—Under the head of "Foreign Bodies in the Air Passages," Dr. A. J. Brady, has called attention to a most important point in the administration of anæsthetics for Dental operations. I not only cordially agree with his contention as to what I should call the only suitable position for an anæsthetised patient during dental operations, but should like to state that several years ago I actually took occasion to demonstrate to one of our leading Dentists the fact that the position was a possible one for his work. From that experience I should say that Dentists who decided to adopt the position will not operate happily in it for the first case or two, but they will afterwards much prefer

it to any other, both for their own convenience and for their patients' safety. The best position for a cleft palate operation can hardly be anything but a good one for the extraction of tee. h.

The amended hanging head position, as described and figured by me in the *Intercolonial Quarterly Journal* for 1895, will be found still better than the simple hanging-head positions. The amended position inasmuch as it supports the hanging head with the vertical line of the face at right angles to the trunk prevents various obstructions in the anterior triangles of the neck, and so very materially lessens the amount of bleeding. It also gives stability to the head, and makes any prolonged anaesthesia easier and more comfortable for all concerned.

As I have had very frequent experience of adenoid operations in the ordinary hanging-head position, and in the supported hanging-head position, I can speak with confidence on this point. A small iron head-rest at right angles to a shank working vertically in a socket attached a few inches below the edge of the operating table is the only contrivance required.

Did the administration of anaesthetics happen to be part of my work, I should refuse to anaesthetise a patient for a dental operation in any other position than that of hanging-head, or, and preferably, in that of supported hanging-head.

I am, Sir, yours faithfully,

J. LOCKHART GIBSON, M.D.

Hon. Surgeon for Eye, Ear, Throat, and Nose, Brisbane Hospital for Sick Children.

MEDICAL INSURANCE.

A SUGGESTION.

(To the Editor of the Australasian Medical Gazette.)

SIR,—It will, I think, be conceded by most of your readers that after the expenses of the average general practice in the colonies are disbursed but a small amount of legal currency is left wherewith to provide a *locum tenens* to do the work of the proprietor of that practice, who may be stricken down by disease. This sudden and distinctly vexatious demand on a languishing exchequer is a serious item to a man in the receipt of but a very slender income from the practice of his profession, and it is in view of this fact that I would suggest the formation from, and to be managed by, the ranks of the medical profession, of a society which would, for the annual payment by a member of a given sum, grant to that doctor say £6 per week during his sickness, the payment to terminate at the end of three or six months, according to the period to be determined on by those who organise the society aforesaid.

Or again, the profession as a body might, I venture, approach some well-established life assurance company with a view to get it to amend its constitution so as to enable it to provide some such assistance as that referred to. Certain insurance societies already insure one against accidents, typhoid fever, and diphtheria, which is an excellent provision, I admit, but then it is generally the inherent perverseness of the average hard-up practitioner with an abundant family to get *hors-de-combat* from some disease that doesn't come within this too restricted category.

I am, Sir, &c.,

B. H. TRELOAR.

Newcastle West.

PUBLIC HEALTH.

THE Councils of the Suburban Municipalities (Sydney) have appealed to the Premier for funds for carrying out the provisions of the Public Health Act. The Premier has given a favourable reply.

A man residing in Sydney has been fined for allowing a son of his, who was suffering from scarlet fever, to go out into the streets. The City Solicitor appeared to prosecute.

The Deputy Governor of Queensland has appointed the Honorable William Frederick Taylor, M.D., M.L.C., D.P.H., Wilton Wood Russell Love, M.B., Mast. Surg. Univ. Edin., Ernest Sandford Jackson, M.B., B.S., Charles Joseph Pound, F.R.M.S., Director of the Stock Institute, and John Brownlie Henderson, Government Analyst, to be a Board for the purpose of inquiring into and reporting upon the subject of chronic lead-poisoning in Brisbane and other parts of Queensland.

The Dunedin, N.Z., city abattoirs were formally opened on May 7.

The outbreak of cholera among the natives of the Loyalty Islands, and the existence of Asiatic cholera in British New Guinea, have led to the issuing of instructions by the Chairman of the Victorian Board of Public Health for the careful examination of all vessels arriving at the port of Melbourne from any of the ports of the affected islands. The black mark of the Board's decision is now directed against all the vessels arriving from South-Eastern China, Calcutta, Bombay, Hong-kong, Sumatra, Java, Loyalty Islands, and New Guinea.

The agitation for a public crematorium in Wellington, N.Z., has resulted in the City Council deciding to submit to the ratepayers a vote for £2,000 for the erection of such a building.

The supposed epidemic of gastric influenza at Latrobe, Tasmania, has turned out to be typhoid fever, and several deaths have been reported.

Scarlet fever and measles are prevalent all over Tasmania, and the schools on the north-west coast have been closed.

VITAL STATISTICS.

SYDNEY.—The Registrar-General's report on the vital statistics of Sydney and suburbs for the month of April shows that the births of 978 children were registered, viz., 506 males and 472 females. The deaths numbered 434, viz., 240 males and 194 females. According to the classification of causes of death, local diseases, with a total of 219 deaths, occasioned 50.46 per cent. of the mortality of the month, and the most prominent in this class were—apoplexy, 13; paralysis, 12; convulsions, 11; heart disease, 35; bronchitis, 11; pneumonia, 13; enteritis, 44; cirrhosis and other diseases of the liver, 13; and Bright's disease, 12. Constitutional diseases came next with 81 deaths (18.67 per cent.), the principal being—cancer, 26; phthisis, 33; and tubercular meningitis (hydrocephalus), 6. Specific febrile or zymotic diseases, with 51 deaths, contributed 11.75 per cent., the primary being—measles, 3; scarlet fever, 3; diphtheria, 12; typhoid, enteric fever, 10; and diarrhoeal diseases, 17. Deaths from developmental diseases numbered 23 (5.30 per cent.)—premature birth, 10; malformations, 5; and old age, 8. From ill-defined causes the number was 28 (6.45 per cent.), 26 of which were of infants, from atrophy, debility, inanition. There were 24 deaths from violence (16 males, 8 females). Forty-four persons (23

males, 21 females) of the age of 70 and upwards died during the month. There were 10 deaths of mothers from diseases or casualties incident to childbirth. The number of deaths of children under 5 years of age was 169, or 88.94 per cent. of the total mortality, and of these 120 were under the age of 1 year. The number of births to every 1000 of the population was 2.34, and of deaths 1.04.

MELBOURNE.—During the month of April there were registered in Greater Melbourne 943 births (479 males and 464 females), and 821 deaths (440 males and 381 females). To every 1000 of the population the proportion of births was 25.02, and of deaths 21.78 per annum. Deaths among children under 5 years of age, 324, of which 183 were under 1 year of age. The principal causes of death were—measles, 99; influenza, 5; diphtheria, 13; typhoid fever, 36; cancer, 36; phthisis, 76; apoplexy, 20; pneumonia, 40; enteritis, 88; bronchitis, 11.

ADELAIDE.—During the month of March there were registered in the city of Adelaide 82 births and 83 deaths. Twenty-one of the deaths were under 1 year of age. There were 6 from typhoid fever, 2 from puerperal fever, 2 from phthisis, 5 from pneumonia, 7 from old age. There were 859 births and 404 deaths in the colony of South Australia, exclusive of the Northern Territory.

NEW ZEALAND.—The proportion of deaths registered during April to every 1,000 of the population was 1.24 for Auckland and suburbs, 0.80 for Wellington with suburbs, 0.63 for Christchurch and suburbs, and 0.84 for Dunedin and suburbs. The total births in these four boroughs amounted to 343. The deaths were 160, to which males contributed 90, and females 70. Forty-seven of the deaths were of children under five years of age; 41 of these were under one year of age. There were 11 deaths from cancer, 18 from phthisis, 3 from pneumonia, 8 from typhoid fever, 15 from diarrhoea.

BALLARAT.—During the month of March 131 births were registered in Ballarat and suburbs. There were 132 deaths. The principal causes of death were—typhoid fever, 8; cancer, 5; phthisis, 6; pneumonia, 5; enteritis, 29. During April there were 85 births and 96 deaths registered. The chief causes of death were as follows:—Diphtheria, 1; typhoid fever, 11; cancer, 5; phthisis, 5; pneumonia, 6; enteritis, 14. An exceptionally high mortality continues to prevail in the Ballarat district, so much so that in the months of January, March, and April of the current year the deaths actually exceeded the births—a circumstance which occurred only twice previously in the last nine years, viz., in January, 1889, and February, 1893. The increased mortality does not appear to have been due to one class of disease, although out of a total increase of 40 deaths in the month under review as compared with April, 1897, typhoid fever accounted for an increase of 10; diseases of the respiratory system for 9; and those of the digestive system for 10 deaths.

HOBART.—Dr. G. Sprott, City Health Officer for Hobart, reports that during the month of April there were 47 deaths registered in the district of Hobart. There were 30 deaths in the city, giving a death rate equal to 12.24 per 1,000 per annum. The principal causes of death were—Typhoid fever, 4; influenza, 1; diarrhoea, 2; phthisis, 1; tuberculosis, 1; softening of brain, 1; heart disease, 3; pneumonia, 2; apoplexy, 1; suicide, 1; infantile debility, 1; and the remainder of a general nature. Of the deaths, 7 were under 1 year, 1 between 1 and 5 years, 15 between 5 and 65, and 7 over 65 years of age. There were 71 births registered

in the district; 54 (males 29, females 25) were born in the city.

BRISBANE.—During the month of March there were registered in Brisbane 136 births and 86 deaths. The chief causes of death were—dengue fever, 13; typhoid fever, 1; cancer, 3; phthisis, 11; enteritis, 10.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

HOBART HOSPITAL.—REPORT FOR 1897.

In 1896 the net average cost per patient was £3 18s. 9½d.; this year £3 18s. 6½d. The actual cash collection during 1896 amounted to £611 16s. 7d.; this year to £754 9s. 5d. The net expenditure for 1897, as compared with that of 1896, shows the slight increase of £4 10s. 6d., although 51 more cases were treated, and the average stay in the hospital two days longer this year. During the year there were 1,384 in-patients treated (850 males and 534 females). The receipts were £6,404 9s. 5d. (including £1,314 16s. 11d. Government aid, private contributions, and other sources). The whole amount was expended, and the Board of Management states that it is not in a position to return any portion of the grant-in-aid, as it has been only through the most careful supervision and the exercise of the greatest economy, that both ends were made to meet. During the year 1,384 in-patients were treated, as compared with 1,293 in 1896. Of the 1,384 cases treated 626 came from the country districts. It is noted that the average stay of patients in the Hospital was 24 days, as against 22 in the preceding year. Out-patients numbered 1,291, and the total attendances on them is set down at 5,305. In 1896 the out-patients numbered 1,398, with total attendances 5,796. Dispensary patients numbered 637, and these received 923 prescriptions. These figures for 1896 were 661-964. The Board of Management say:—The vestment of the sole control and management of the institution in the Board for a fixed amount still continues a matter of congratulation for all concerned, for, although during the year there was a very considerable increase in the number of patients treated in the hospital—the second highest number recorded for 17 years—the gross cost is £663 below the average expenditure for that time.

WELLINGTON HOSPITAL, NEW ZEALAND.—At a meeting of the Wellington Hospital Trustees a motion was agreed to, that the members of the honorary staff be asked to assist Dr. Ewart in the out-patients work. It was stated that Dr. Ewart was rushed by out-patients. The honorary medical staff for the ensuing two years was appointed as follows:—Surgeons: Drs. Collins, Martin, Anson, and James; Physicians: Drs. Adams, Teare, Chapple and Pollen; Ophthalmic Surgeon: Dr. Mackenzie; Pathologist: Dr. Fyfe; Dental Surgeon: Mr. R. O. Bulkeley. Mr. Hiley received the appointment of dispenser at the Hospital, there being four applicants.

KEW AND YARRA BEND LUNATIC ASYLUMS, VIC.—Several representations, amounting in their emphasis almost to protests, which the Victorian Branch of the B.M. Association and the members of the staff of medical visitors to the Kew and Yarra Bend Lunatic Asylums have made to the Government during the past twelve months with respect to the over crowding and other seriously objectionable conditions at those institutions, are at length receiving the practical attention of the Treasurer. Both Asylums were affected by the retrenchment policy to the extent that now proves to have been by no means justified. The medical staff is

few in number and insufficiently paid, the standard of efficiency among the attendants has been reduced by the appointment of unskilled persons to vacancies; some of the sanitary conditions are hopelessly bad and cannot be remedied save by the substantial expenditure of money, and the conditions generally are such as to preclude the proper classification and effective treatment in a large section of the inmates. These are facts of which every medical man in Melbourne, who has had experience in the treatment of the insane and know Kew and Yarra Bend is ready to testify, and the *Age*, four months ago, assisted in making a strong representation of them to the Government. The Chief Secretary, in whose department the administration of the Asylums is vested, was by no means difficult to convince in the matter, but he was unable to get any money for immediate improvement, and so up to the present none of the changes urged have been made. Experts who are familiar with the work of the two institutions declare that something like £10,000 a year ought to be spent upon them for several years in succession.—*Age*, May 24th.

It is officially notified that on and after 1st May, 1898, joint cards of admission will be issued to the clinical instruction of the following London hospitals and schools of medicine, Charing Cross, Guy's, King's College, Middlesex, St. Thomas', University College, and Westminster. These cards will be available for qualified medical men—British, Colonial, or Foreign—and will be issued at the following rates: for 3 months, 7 guineas; 6 months, 10 guineas; and for any longer period at the further rate of 5 guineas for each additional 6 months. Cards and further particulars may be obtained on application to the Under-Secretary, West Wing Examination Hall, Victoria Embankment, London, W.C.

Professor Anderson-Stuart, of Sydney, has been offered the Honorary L.L.D. Degree of Edinburgh University.

CAMBRIDGE UNIVERSITY.—Cyril E. Corlette, M.D., Ch.M., Univ., Syd., has obtained the D.P.H., Camb.

LITERARY NOTES.

THE pamphlet, 'Leprosy in Hawaii: A Critical Study,' by Dr. Ashburton Thompson, the Chief Medical Officer of the Government of N. S. Wales, forms the basis of an interesting leading article, entitled "Leprosy as a Telluric Disease," in the *British Medical Journal* for May 7th, page 1,215.

A short note by J. C. Halliday, M.B., Ch.M., Univ., Syd., dealing with 100 consecutive cases of appendicitis treated during the last five years at Prince Alfred Hospital, Sydney, appears in the *B. M. Journal* of May 7th.

MEDICAL NOTES.

PRESENTATION TO A MEDICAL MAN.—Dr. B. J. Adam, who has practised his profession during the past ten years at Beaufort, Vic., has been presented with a handsome illuminated address and a piece of plate on the occasion of his leaving the locality. The presentation was made on behalf of the inhabitants of the town and district of Beaufort.

Dr. W. F. P. Bassett has been appointed Visiting Justice to the gaol at Bathurst, N.S.W., during the absence of C. E. Smith, Esq., P.M., on leave.

NAVAL AND MILITARY INTELLIGENCE.

New South Wales Medical Staff Corps.—Hon. Surgeon-Lieutenants F. H. Wrigley and J. Brooke Moore have been appointed Hon. Surgeon-Captains. Hon. Surgeon-Lieutenant W. Irwin has resigned his commission.

Queensland. — Staff - Surgeon J. A. C. Penny, L.R.C.S.I., has been appointed a Lieutenant in the Queensland Defence Force (Marine). Surgeon-Major D. S. Macdonald is to be in command of the Port Curtis Section of the Medical Corps during the absence (on leave) of Surgeon-Captain F. H. V. Voss.

Victoria.—Dr. William C. Daish has been appointed Surgeon-Captain (on probation), Reserve of Officers, Medical Staff, Militia. Surgeon-Captain A. H. Sturdee has been appointed Surgeon-Captain on the Medical Staff, Militia, Fixed Establishment.

New Zealand.—The commission of Surgeon-Captain Walter Hialop, Petone Naval Artillery, has been cancelled, he having left the district. Jas. B. Purdy has been appointed Surgeon-Captain Petone Naval Artillery Volunteers.

OBITUARY.

MICHAEL JOSEPH COLLINS, L.R.C.S. Edin., 1882, who recently started practice at Deloraine, Tasmania, died in a Launceston private hospital of typhoid fever on May 31st, after a short illness. Dr. Collins arrived from Balmain, Sydney, only a few months ago, and had already made himself favourably known in the district. His death at the early age of 45 is much regretted, and the deepest sympathy is felt for his widow and four children, who are left to mourn their loss.

WILLIAM JAMES GRAY, L. and L. Mid., R.C.P. and S. Ed., L.F.P.S. Glas., 1894, was out shooting with a friend on May 17, when, while getting through a fence, his gun went off and caused his death. Dr. Gray, who was a native of Victoria, arrived in the colony in March, 1897, and had practised for a short time at Elmore, Vic., where his death took place. He was 31 years of age.

HORACE GRATTAN KELLY, L. and L. Mid., R.C.P. and S. Edin., L.F.P.S. Glas., 1895, died at Pyramid Hill, Vic. on June 5. Dr. Kelly, who leaves a widow and one child, was 28 years of age.

ROBERT TALBOT, M.D. Edin. 1846; M.D. (a.s.g.) 1864, Ch.B. 1880, Melb., died at North Brighton, Melbourne, on May 18. Deceased, who was a Surgeon-Major in the Victorian Military Forces, was a colonist of 50 years' standing. He held the position of Health Officer to the town of Brunswick for 38 years.

MEDICO-LEGAL.

PROSECUTIONS UNDER THE HEALTH ACT, VIC.

At the Stawell, Vic., Police Court Dr. George James Naphthine was proceeded against under section 125 of the Health Act for failing to report a case of typhoid fever. Counsel for the defendant explained that at about the time the neglect occurred the doctor's house was destroyed by fire, and there was sickness in his family, which caused him to overlook the matter. A nominal fine of 1s. was imposed.

At the Ballarat Police Court, on May 18th, Dr. William Houston Low was prosecuted under section 129 of the

Health Act, for not having issued a certificate to a certain householder, informing him that an inmate of his house was suffering from an infectious disease, to wit, typhoid fever. The Bench, holding that typhoid was not an infectious disease, dismissed the case, with three guineas costs against the city council.

MEDICAL ETHICS.

"MEDICINE AS SHE IS ADVERTISED."—The appended advertisement appeared in the *Hobart Mercury*, 7th March, 1898:—"Dr. A. Crosbie Dixey, Member Royal College Physicians, Edinburgh, wishes to announce he has started a Consulting Practice in New Norfolk. Specialities—Typhoid and other Fevers, and Diseases of Women and Children. 'Woodbridge,' New Norfolk." Comment upon the above is needless.

BATTLE OF THE CLUBS.

AT BRUNSWICK AND COBURG, VIC.

A CONFERENCE of the friendly societies of Brunswick and Coburg was held on 20th instant for the purpose of considering the resolution adopted at the recent meeting of the societies, 'That in the opinion of this conference it is desirable that the friendly societies of Brunswick and Coburg should combine for the purpose of appointing their own medical officers.' There were 22 friendly societies in the two districts, of whom 16 were represented at the conference. It was explained that the object of the conference was, if possible, to secure some cheaper and more concrete system of medical service, and also to bring that service under the direct control of the combined lodges as the U.F.S. dispensary had been brought some time ago, and which had been found to be advantageous from several points of view. It was pointed out that roughly the lodges paid to the local medical men £1,100 per annum for 1,900 members, and in this case the lodges could afford to retain the services of two medical men at £500 per annum solely for the benefit of members, and at the same time affect a considerable saving in lodge funds. (*Vide* Editorial, pages 268-9.)

RECOVERY OF MEDICAL FEES IN N.S.W. COURTS.

THE Council of the N.S.W. Medical Union recently obtained from Mr. John Lane Mullins, Solicitor, of Sydney, the following opinion on the above subject:—

OPINION.

The question presented to me for an opinion is in this form:

"Can a medical man sue for fees in the Small Debts Court?"

Before dealing with the rights and remedies of medical men it is well to enquire at the outset what is meant by the term "medical men." I take it to include physician as well as surgeon, and to mean that a practitioner with a qualification entitling him to practise medicine or surgery would come under the category of "medical men." A distinction was, for many years, drawn by custom between the duties of a physician and those of a surgeon. The former were held to be of an honorary nature, and though the physician might be the recipient of a gift or honorarium, his fees for professional aid could not become the

subject of an action at law unless a special contract for payment had been made.

A surgeon, on the other hand, was not restricted by any such conventional limitation. He performed his work and could recover his fees as a debt in any court, and enjoyed the full rights of an ordinary plaintiff.

The same custom which prevailed in England similarly affected medical men in the colony of New South Wales until the District Court Act of 1868 removed the disability. In this Act, by express mention, "any doctor of medicine, or other legally qualified practitioner in medicine, may sue for the recovery of any fees or other remuneration, as such practitioner, in like manner, as any debt or demand may be recovered by any surgeon or other person under this Act."

The Small Debts Recovery Act makes no provision for medical men to seek the aid of the Petty Debts Court in enforcing payment of fees; and the custom of honorary service again prevents the physician from claiming its jurisdiction in the absence of a special contract for payment.

The same custom exempts physicians from the benefit of the Common Law Procedure Acts, and they are, therefore, unless a special agreement for remuneration has been made, not entitled to sue for fees in the Supreme Court.

It has been urged that under the English Act, which is known as the Medical Act of 1858, and which gave all persons registered under its provisions power to practise in any of her Majesty's dominions, and to demand and recover in any Court of Law reasonable charges, &c., the legal status, in New South Wales, of physicians so registered is affected. This cannot be the case, as the Section referred to has been repealed by the English Medical Act of 1886. The Statute of 1886 enacts that a registered medical practitioner shall be entitled to practise in the United Kingdom and (subject to any local law) in any other part of Her Majesty's dominions, and to recover in due course of law any expenses, fees, &c., unless he is, as a Fellow of a College of Physicians, prohibited by a by-law from suing.

I am, therefore, of opinion that in the absence of a special agreement a physician can sue for services as a physician in the District Court only.

A surgeon can exercise the rights of an ordinary plaintiff in any court he pleases.

JOHN LANE MULLINS.

5 Moore Street, Sydney.
March, 1898.

CHANGE OF ADDRESS, ETC.

BARNES, Dr. J. S., has removed from Wyndham to Katanning, W.A.

BEDFORD, Dr. R. P., has been granted leave of absence from his duties on the hon. medical staff of the Auckland Hospital, N.Z., on account of ill health.

BERRY, Dr. R. S., of Beaudesert, Q., has succeeded to the practice of Dr. Brockway, at Southport, Q.

BOWKER, Dr. C. S., late of West Maitland, has commenced practice at Tumut, N.S.W.

DIXEY, Dr. A. C., has commenced a consulting practice at New Norfolk, Tas.

JOHNSON, Dr. E. A., has left the Children's Hospital for St. Catherine's, Prospect, (Adelaide).

MAIN, Dr. Bertha, has returned from England and has resumed practice at 148 Williams-road, Hawksburn, Vic.

MORIER, Dr. C. G. D., of Nairne, S.A., has gone for a trip to England, &c.

MORROW, Dr. R., late of Coolgardie, has commenced practice at 499 High-street, Prahran, (Melbourne).

MURRAY, Dr. A. L., has commenced practice at Pukekohe, Prov. Auckland, N.Z.

PENNY, Dr. H. J., has succeeded to the practice of Dr. Oldmeadow, at Hillside, New Norfolk, Tas.

PERRY, Dr. W. D., late Assistant Medical Officer at the Parima Asylum, has succeeded to the practice of Dr. F. Scanlan, at Petone, near Wellington N.Z.

ROBINSON, Dr., of S.A., who is on a trip to England, &c., has disposed of his practice to Dr. Powell.

TENNANT, Dr. E. G., has left Marrickville, near Sydney, for Dubbo, N.S.W.

TRENOW, Dr. A. A., has commenced practice at Croydon, Q.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced:—

Adams, H., L.R.C.P. Lond., &c., to be Honorary Physician to the Wellington Hospital, N.Z.

Anson, G. E., M.R.C.S. Eng., &c., to be Honorary Surgeon to the Wellington Hospital, N.Z.

Barnes, J. B., Dr., to be Resident Medical Officer and Public Vaccinator for the Urban, Suburban, and Rural Districts of Kaitang, W.A.

Blaxland, W., F.R.O.S., &c., to be a Public Vaccinator for S.A.

Campbell, D. A., M.B., &c., to be Public Vaccinator at Rosedale, Vic., vice Dr. A. Macdonald, resigned.

Chapple, W. A., M.B. Edin., &c., to be Honorary Physician to the Wellington Hospital, N.Z.

Collins, W. E., M.R.C.S. Eng., &c., to be Honorary Surgeon to the Wellington Hospital, N.Z.

Connelly, A. W., M.B. Melb., &c., to be Resident Surgeon of Bendigo Hospital, Vic.

Corry, W., M.D., &c., to be Public Vaccinator for Phillip Isd. Shire, Vic., vice Dr. Richard Jones, resigned.

Dowe, S. A., M.D. Univ. Penn., U.S.A., has been appointed Government Officer for the district of Bobadah, N.S.W.

Fyffe, E. H., M.B. Glas., &c., to be Honorary Pathologist to the Wellington Hospital, N.Z.

Godfrey, C. G., M.R.O.S.E., &c., to be Acting Medical Superintendent of the Ballarat Lunatic Asylum.

Grant, David, M.A., M.D. Edin., &c., to be Honorary Physician to In-patients St. Vincent's Hospital, Melbourne.

Higgins, F. O., M.B. Syd., &c., to be Government Medical Officer and Vaccinator at Walgett, N.S.W.

James, D. P., M.R.C.S. Eng., &c., to be Honorary Surgeon to the Wellington Hospital, N.Z.

McGee, J. H., L.R.C.S.I., &c., to be Honorary Physician to Out-patients, St. Vincent's Hospital, Melbourne.

Mackenzie, F. W., O.M. Edin., &c., to be Honorary Ophthalmic Surgeon, Wellington Hospital, N.Z.

Martin, A., M.R.O.S. Eng., &c., to be Honorary Surgeon to the Wellington Hospital, N.Z.

Murphy, M.D., L.F.P. & S. Glas., &c., to be a Public Vaccinator for N.Z.

Newman, F. A., M.B. Melb., &c., to be Honorary Physician to Out-patients, St. Vincent's Hospital, Melbourne.

Pollen, H., M.D. Dub., &c., to be Honorary Physician to the Wellington Hospital, N.Z.

Rosenfeld, E. L., M.R. Melb., &c., to be Government Medical Officer and Vaccinator for district of White Cliffs, N.S.W.

Ryan, T. F., M.B., &c., to be Acting Officer of Health for the Shire of Iowan, Vic., and Acting Public Vaccinator at Nhill, Vic., during absence of Dr. E. Ryan, on leave.

Teare, J., M.B. Vic. Univ., &c., to be Honorary Physician to the Wellington Hospital, N.Z.

Wilson, G. B., M.D., &c., to be a Public Vaccinator for S. A.

Woodside, R. N., M.B. Melb., &c., to be Medical Superintendent of the Albury Hospital, N.S.W.

Yelland, Dr. A., has been appointed Resident Surgeon to the Hospital, Creswick, Vic., vice Dr. T. A. Wilson, resigned.

MEDICAL RESIGNATIONS.

The following Medical Resignations are announced:—

Badock, A., M.B. Durh., as Resident Medical Officer and Public Vaccinator for the Urban, Suburban, and Rural Districts of Kaitang, W.A.

Jones, R., Dr., as Public Vaccinator for Phillip Isd. Shire, Vic.

Macdonald, A., Dr., as Public Vaccinator at Rosedale, Vic.

Wilson, Dr. T. A., as Resident Surgeon at Creswick Hospital, Vic.

REVIEWS.

OUTLINES OF RURAL HYGIENE. FOR PHYSICIANS, STUDENTS, AND SANITARIANS. By Harvey B. Bashore, M.D., Inspector for the State Board of Health of Pennsylvania. With an Appendix on THE NORMAL DISTRIBUTION OF CHLORINE, by Prof. Herbert E. Smith, of Yale University. Illustrated with twenty (20) engravings. Pages vi-84. Extra cloth, 75 cents net. The F. A. Davis Co., Philadelphia; New York City; and Chicago, Ill. 1897.

These outlines consist of a number of papers which have appeared from time to time in various medical periodicals. They consist of articles on Water Supply, Waste Disposal, The Soil, Habitations, and Disposal of the Dead. An appendix contains a very readable article by Professor H. E. Smith on the Normal Distribution of Chlorine.

All these papers are extremely interesting, and show an intimate acquaintance with the subjects treated of by the author. The illustrations are very appropriate.

ELEMENTS OF LATIN. FOR STUDENTS OF MEDICINE AND PHARMACY. By George D. Crothers, A.M., M.D., Teacher of Latin and Greek in the St. Joseph (Mo.) High School; formerly Professor of Latin and Greek in the University of Omaha; and Hiram H. Bice, A.M., Instructor in Latin and Greek in the Boys' High School of New York City. Pages xii-242. Flexible cloth, \$1.25 net. The F. A. Davis Co., publishers, Philadelphia; New York City; and Chicago, Ill. 1898.

This book is designed to present within the briefest possible compass those principles of Latin Etymology and Construction which are essential to an intelligent use of the terminology of pharmacy and medicine. It is not intended as an introduction to the Latin language and literature. It is certain that this little work will aid students of medicine and pharmacy in the acquisition of a better and more serviceable knowledge of that language.

An elementary knowledge of medicine in all its branches may be acquired from a careful study of this little book.

TRANSACTIONS OF THE ROYAL ACADEMY OF MEDICINE IN IRELAND. Vol. xv. Edited by John B. Story, M.B., F.R.C.S., General Secretary; Surgeon to St. Mark's Ophthalmic Hospital, Dublin. Dublin: Fanning and Co., Ltd. 1897.

This annual volume contains some excellent papers on Medical Science. On June 11 last Professor His, of Leipzig, delivered an address on *The Development of the Brain* to the members of the Academy, and this Address, which is well illustrated, is printed at length.

In the Section of Medicine Dr. H. C. Drury writes on *Guaiacol in Pyrexia*, Dr. E. J. McWeeney on *Widal's Method of Typhoid Diagnosis*, and other writers discuss various subjects.

In the Section of Surgery Sir William Thompson contributes an interesting paper entitled *Some Surprises and Mistakes*, which well repays perusal.

In the Obstetrical Section Dr. Atthill discusses the action of ergot on pregnant women.

There are also some very readable papers in the Sections of Pathology, State Medicine, and Anatomy and Physiology.

The volume is well illustrated, the editor has done his work well, and the Academy is to be congratulated on the publication of so many important contributions to the Science of Medicine.

AIR, FOOD, AND EXERCISES: AN ESSAY ON THE PREDISPOSING CAUSES OF DISEASE. By A. Rabagliati, M.A., M.D., F.R.C.S. Edin., Hon. Gynaecologist, and late Senior Honorary Surgeon, Bradford Royal Infirmary; Consulting Medical Officer, Bradford Children's Hospital. London: Baillière, Tindall and Cox. Sydney: L. Bruck, n.d., Price, 6s.

The main proposition elucidated in this essay is that there are three chief predisposing causes of Disease, as there are, conversely, three predisposing causes of Health; and that these are Air, Food, and Exercise. Dr. Rabagliati argues that the improvements which have taken place in the public health are seen only in a diminution in the incidence and mortality from fevers and from consumption; the effects of surgery have exerted no appreciable improvement on the public health; carcinoma is the culmination of mal-nutrition in tissue; no disease occurs in the body unless the material or pabulum thereof is first found in the blood; there is nothing in the blood of an adult which has not been introduced by the food or by the air; heredity is of far less importance as a predisposing cause of disease than are the habits of the individual, &c.

We are afraid the author will find it difficult to convince his readers on all these points.

The essay is very readable, but it would be better if it were divided into chapters instead of running through some 200 pages. Dr. Rabagliati subscribes to the fallacious doctrine of Letheby, that a low birth-rate implies a low death-rate, and a high birth-rate implies a high death-rate. Dr. Farr has shown that populations having a continuously high birth-rate should (sanitary conditions being equal) have lower death-rates than populations having low birth-rates, because a continuously high birth-rate means an exceptionally large proportion of young adults in the community, and consequently a very much smaller proportion of aged people. Conversely, a low birth-rate means a small proportion of young adults and a large proportion of aged people, and is therefore unfavourable to a low death-rate. Dr. Farr's opinion has been shown to be the correct one.

SPINAL CARIES (SPONDYLITIS, OR POTTS' DISEASE OF THE SPINAL COLUMN). By Noble Smith, F.R.C.S. Ed., L.R.C.P. Lond., Surgeon to the City Orthopaedic Hospital; Surgeon to All Saints Children's Hospital; Orthopaedic Surgeon to the British Home for Incurables. Second edition, 8vo., pp. 163, illustrated. London: Smith, Elder and Co., 1897. Price, 5s.

But three years have elapsed since Mr. Noble Smith published the first edition of his well-known work, and in this edition he has made some practical additions. A new form of headpiece for cervical disease is described, and some remarks upon the Forced Reduction of the Deformity of Caries under Chloroform are added.

The author is convinced that spinal caries is generally a curable disease, but that success depends above all things upon accurate support of the spine.

Mr. Smith's language is clear and concise, and must bring conviction to the minds of his readers. The work is well illustrated from original drawings and photographs.

We are pleased to find that a good index has been added to this edition.

A TEXT-BOOK OF DISEASES OF WOMEN. By Charles B. Penrose, M.D., Ph.D., Professor of Gynaecology in the University of Pennsylvania; Surgeon to the Gynecæan Hospital, Philadelphia. Philadelphia: W. B. Saunders. Sydney: L. Bruck. 1897.

This book has been written for the medical student by one who has an excellent grasp of his subject. Beginning with the General Causes of Diseases of Women, Professor Penrose points out that civilisation is the chief cause of many of the diseases that women are heir to. Then there is a well-written chapter on the Methods of Examination. The Diseases of the Various Organs and Tissues are discussed in some forty chapters, which are profusely illustrated.

It is impossible to speak too highly of this work. The various steps in the operations—both major and minor—are described in minute detail; the illustrations are apt, and exceedingly clear. The author, bearing in mind the fact that the work is written for the student, has wisely recommended, in most instances, but one plan of treatment for each disease, hoping in this way to avoid confusing the student or physician who consults the book for practical guidance.

DISEASES OF WOMEN: A CLINICAL GUIDE TO THEIR DIAGNOSIS AND TREATMENT. By George Ernest Herman, M.B. Lond., F.R.C.P., Obstetric Physician to, and Lecturer in Midwifery at the London Hospital, &c., &c. With 252 illustrations. Cassell and Co., London, Paris, and Melbourne. Price, 25s.

This book is dedicated "to the memory of James Matthews Duncan and Henry Gawn Sutton, to whose teaching whatever is good in the book is mainly due."

In the preface the author says, "I have written this book because it seemed to me that a book was wanted which would guide the Student and Practitioner to the diagnosis and right treatment of diseases of women. I have tried to present the different diseases which affect the organs peculiar to women in the way they appear in practice. . . . I may plead that I have one qualification for writing such a book, not always possessed by the authors of text-books—namely, clinical experience."

The volume is divided into XI. parts. Part I., General. Part II., Chronic Pelvic Pain. Part III., Pelvic Inflammations. Part IV., Internal Hæmorrhage. Part V., Hæmorrhage. Part VI., Leucorrhœa. Part VII., Disorders of the Vulva. Part VIII., Disorders of Menstruation. Part IX., Disorders of the Sexual Functions. Part X., Disorders of Parts Adjacent to the Sexual Organs. Part XI., Abdominal Tumours.

The author broadly divides Gynaecology into two parts, Major and Minor—the former being Surgical, and the latter chiefly Medical. The plan adopted in this book is to place Clinical Symptoms in the forefront, as patients come complaining of *symptoms*, and not labelled "Disease of Uterus," or "Disease of Ovary," &c. The style is very pleasing, and the whole work bears evidence of the author's statement that he possesses "clinical experience." In a work of such general excellence it is invidious to single out any parts for special notice, but the chapters on Neurasthenia and Pelvic Inflammation are particularly interesting to the general practitioner.

The illustrations very clearly depict the various pathological conditions met with, and the steps of many of the operations for the repair of lacerations, displacements, &c., &c.

Altogether we can strongly recommend the book as one of the best of its kind that has ever been published.

A NOTE ON HOPEIN.

THIS drug was brought under the notice of the medical profession in Dunedin last year, as a substitute for the ordinary anodynes and hypnotics. It was represented as being an extract of the white pop—whatever that may be—quite harmless, and of marvellous efficiency in subduing pain. A well-known citizen, dying of cancer, had it administered to him, and got great relief from it. In a small way it became rather a popular remedy, people getting it and giving it to their friends as being "quite harmless," and the patients who got it were generally charmed with it. Its source was not above suspicion. Kennedy, who was in the colonies a few years ago in the interests of the Mattei remedies, was practically its sponsor. In his book on "Cancer and the Knife" (1891), he said that in some cases of cancer it was worth its weight in gold, and it was through his recommendation that the gentleman who introduced it into Dunedin learned of its merits. But it was evident that the drug was one of undoubted powers, and it seemed worth trying. The writer of this note, on taking a small dose, was impressed with the similarity of its action to that of morphia. A few chemical tests showed that this suspicion was probably correct. An examination by Professor Black at the University Laboratory confirmed the observation, but it seemed to both of us that there was another alkaloid present. A sample was sent to the Editor of the *British Medical Journal*, who very kindly had it analysed, and reported that 99 per cent. of the sample consisted of morphia. He also referred the writer to an article by Dr. Paul, read before the London Pharmaceutical Society in 1886, on "Hopein." In this article, Dr. Paul showed that hopein was really a mixture of morphia and cocaine. The thing was a pure swindle for an obvious purpose, the price originally charged for hopein being about fifteen times that of morphia. The exposure of the transaction in London led no doubt to the drug being unloaded on the colonial market, and as it has been sold in Auckland, and may probably be used in Australia, this note is published as a warning. It may be worth noting that the exposure of the fraud took place in London in 1886, and that Kennedy's laudation of "Hopein" is dated 1891.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Gilles, Sinclair, M.D. Univ. Lond. 1898; Dip. Pub. Health, Camb. 1897; Mem. R. Coll. Surg. Eng. 1896; Lic. R. Coll. Phys. Lond. 1896.
 Rand, Elias Charles, M.D. Rush. Med. Coll. Illinois, U.S.A., 1897.
 Crossfield, Hedley Robert Vioars, M.B. & Mast. Surg. Univ. Glas. 1888.
 Walton, William Bain, M.B. & Ch.M. Univ. Sydney, 1898.
 Lalor, Joseph, Lic. & Lic. Midwif. K. & Q. Coll. Phys. Irel. 1883; Lic. R. Coll. Surg. Irel. 1883.
 Gibbes, John Murray, M.D. Univ. Aberd. 1883; M.B. & Ch.M. Univ. Aberd. 1886; Mem. R. Coll. Surg. Eng. 1885; Lic. Midwif. R. Coll. Surg. Eng. 1886.
 And for additional registration—
 Elmer, Frederick William, Lic. Midwif. K. & Q. Coll. Phys. Irel. 1882.

NEW ZEALAND.

Neil, James Hardie, M.B., Bach. Surg. Univ. of N.Z.

QUEENSLAND.

Lancaster, Llewelyn Bentley, M.B. 1896, Univ. Sydney.
 Philpott, Albert John William, M.B., Ch.B. 1897, Univ. Melbourne.
 Morice, Robert James, M.D. 1878, Ch.M. 1874, Univ. Aberd.

Republished—

Stockwell, James, Lic. R. Coll. Phys. Edin. 1886; Lic. R. Coll. Surg. Edin. 1886 (Registered in Queensland 5th November, 1896).
 Little, Joseph Henry, M.B. 1871, Mast. Surg. 1871, Univ. Edin. (Registered 4th June, 1874).

TASMANIA.

David, Alfred, M.D. M.S. Queen's Coll. Kingston, Canada, 1873; Memb. Coll. Phys. and Surg. Toronto, 1874; L.R.C.P. & S. Kingston, Canada, 1890.

VICTORIA.

Teague, Daniel Gilbert Miller, M.B. & Ch.M. Edin. 1896.
 Gregg, James, M.B. Ch.B. & B.A.O. Dub. 1896.
 Name restored to register—
 Morrow, Robert, M.B., B. Ch., Dub. 1884.

WESTERN AUSTRALIA.

Allan, Elliott Randell, M.B. & B.S. Adel. 1897, and Melb. 1898.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

ABBOTT.—On the 24th May, at Kylemore, 203 Stanmore Road, Petersham, Sydney, the wife of G. H. Abbott, B.A., M.B., Ch.M., of a daughter.
 DICKENS.—On the 17th May, at Wyuna, Portarlington, Vic., the wife of F. W. Dickens, M.B., of a son.
 LEY.—On the 28th May, at Chiltern, Vic., the wife of Geo. J. Ley, M.B., of a son.
 LIDDLE.—On the 6th May, at Highett Street, Mansfield, Vic., the wife of Percy H. Liddle, M.B., B.S., M.R.C.S. Eng., of a son.
 MARSHALL.—On the 30th May, at 30 College Street, Hyde Park, Sydney, the wife of George A. Marshall, M.B. & B. Ch., of a son.
 SHAW.—On the 27th May, at Emmaville, N.S.W., the wife of F. C. Seymour Shaw, M.B., Ch.M., of a daughter.
 STANLEY.—On the 24th May, at Summer Hill, N.S.W., the wife of Dr. G. P. Stanley, of Tanworth, of a son.

MARRIAGES.

AITCHISON—PEACOCK.—On the 27th April, at Brighton Presbyterian Church, Vic., by the Rev. D. Gordon, Roderick Aitchison, M.A., M.B., Ch.B., youngest son of the late Alderman Aitchison J.P. of Geelong, to Agnes, fourth daughter of Councillor John Peacock J.P., Middle Brighton.
 DICK—PILOHER.—On the 6th June, at St. Thomas' Church of England, Enfield, by the Rev. E. Stanley Wilkinson, B.A., Robert Dick, M.B., Ch.M. Syd.; D.P.H. Camb., Medical Officer of Health for the Hunter River Combined Districts, N.S.W., to Julia, second daughter of H. C. Pilcher, of Kenton, Stanthfield.
 HENDERSON—NATHAN.—On the 27th April, at Kensington, London, S.W., George Gillian Henderson, M.A., M.B., Ch.M., third son of the late Frank Henderson, M.P., Dundee, Scotland, to Helen Ethel Drutt, eldest daughter of the late Augustus Venour Nathan, and granddaughter of the late Charles Nathan, F.R.C.S., E.
 SCOTT—FLETT.—On the 30th March, at the Auburn Presbyterian Church, Hawthorn, Vic., by the Rev. C. J. Baird, B.D., John Alexander Scott, M.B., Ch.M. Edin., eldest son of David Scott, Edinburgh, to Alice Bruce, only daughter of W. Simpson Flett, M.D., Auburn Road North, Hawthorn.
 WHITE—ANNMAR.—On the 30th April, at the residence of the bride's parents, by the Rev. A. E. Albiston, M.A., Douglas Oakley White, M.B., Ch.B., of Beaufort, Victoria, son of Jesse White, Hobart, to Hannah S., second daughter of Rev. D. Annear, Launceston, Tas.

DEATHS.

GRAY.—On the 17th inst., at Elmore, Vic., Dr. J. W. Gray, only son of the late William Gray, aged 61 years.
 KELLY.—On the 6th June, at his residence, Pyramid Hill, Vic., Horace Gratian Kelly, L.R.O.S., L.R.C.P. Edin., aged 22 years.
 TALBOT.—On the 18th May, at Haslemere, New-street, North Brighton, Vic., Robert Talbot, M.D. Edin., formerly of Brunswick.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

RESULTS OF A BACTERIOLOGICAL EXAMINATION OF DRINKING WATER, MILK, AND SEWAGE FROM SOUTH BRISBANE (Q.).

(For the Medical Officer of Health.)

By A. C. F. HALFORD, M.B., RESIDENT MEDICAL OFFICER, BRISBANE HOSPITAL.

TYPHOID fever having broken out in epidemic form in South Brisbane, several samples of water and of milk were submitted to me for bacteriological examination by Dr. William Kebbell, Health Officer to that municipality.

The samples of water were obtained from seven localities where cases of typhoid had occurred, and were taken from tanks at (1) the Blind Asylum, (2) Walton Street, (3) Gertrude Street, (4) Gloucester Street, (5) Wilton Street, (6) water from a drain at Kangaroo Point, (7) water from the station yard drain. In addition, another specimen, No. 8, was obtained from the Highgate Hill Reservoir.

The samples of milk were obtained from milk-sellers or cow-keepers living in (a) William Street, (b) Raven Street, (c and d) Merivale Street—four samples in all.

All the samples were collected in sterilized bottles supplied by me, those of water on the 5th August, and those of milk on the 9th August, 1897, and were delivered to me on the corresponding evenings. They were placed in an ice-chest until dealt with on the following day in each case. The object of the investigation was to determine, not sewage contamination as measured by the preponderance of coli-forms, but the actual presence of the typhoid bacillus. The method of dealing with these specimens was modified accordingly, and the investigation was proceeded with in the following way.

In the first instance, ordinary gelatine plates were made from 2 c.c. of the tank, reservoir waters and milk. In the case of the drain-waters fractional gelatine plates were made. Secondly, where liquifying organisms proved to be abundant, phenol-gelatine plates (1–2,000) were made after Pariette's method with 10 c.c. of the water. The use of the carbol-gelatine excludes most of the organisms which do not belong to either the colon or typhoid variety. These plates were incubated at about 22° c.

for several days, until colonies of convenient size were formed. A systematic search was then made through all the plates for colonies which, under a low magnifying power of the microscope, resembled those of typhoid. When any such were found, a portion of the suspicious-looking colony was smeared on a platinum needle on a glass slide. The stained preparation was then examined with a $\frac{1}{2}$ oil-immersion lens. If it proved to be a bacillus, and it corresponded morphologically with typhoid, an agar tube was inoculated with the remaining portion of the colony, and incubated at 37° C. From the pure cultures finally obtained by careful plating out, broth cultures were readily made and incubated at 37° C. for about 18–20 hours. If the organisms therein rapidly produced a uniform turbidity of the bouillon and showed themselves to be highly motile in hanging-drop preparations, they were submitted to the serum test with a dilution of about one of serum to nine of bouillon.

In the arduous task of making the hanging-drop preparations and the necessary control preparations, I was very materially assisted by Drs. T. E. Green and G. E. Dennis.

Only one colony was isolated which yielded a positive reaction with typhoid serum. This fact was further investigated in the following manner:—Five specimens of blood were obtained from the fever wards of the Hospital, and were distinguished only by numbers taken at random. The organism reacted to three of these five sera, which were afterwards found to be from undoubted typhoid patients. The remaining two which gave negative results were obtained from a case of pneumonia and a case of rheumatism respectively. The identification of the bacillus was then further proceeded with, with the following results:—

Form.—Identical with dimensions of bacillus typhosus.

Motility.—Nearly all rods were actively motile in fresh bouillon cultures at room temperatures and at 37° C. Mode of progression and general behaviour characteristic of typhoid.

Staining Reaction.—Stain well with Fuchsin, decolorise by Gram's method. *Flagella*: By Van Ermengem's method, with the modifications recommended by Mervyn Gordon, averages of nine flagella and upwards were obtained from enumeration of the "hairiest" individuals in the specimens; the flagella were exceedingly long and wavy. In this staining process, I found that the original direction of

Van Ermengem, to allow the mordant to act for twenty minutes at 60° C., gave better results than allowing it to act for one hour in the cold.*

Growth on Gelatine.—Characteristic of typhoid in surface growth and in the depth. Iridescence beautifully shown in young vigorous growths. No liquifaction.

Agar.—Rapid growth when incubated at 37° C., spreading uniformly over the surface of moist sloped tubes. Iridescence toned down by the slight opacity of the medium. Appearance of growth identical with controls.

Milk.—No coagulation occurred even after over one month's incubation.

Neutral Litmus Whey.—The blue colour was discharged, and a slight pink colouration appeared by the end of the third day. After over one month's incubation at 37° C., the solution is uniformly dull pink. Acid production has been stationary for some time.

Glucose Gelatine (2 per cent.).—No gas produced after long incubation at the lower temperature.

Potato.—The appearances on potato have varied slightly. In some cases, the growth has been visible and fairly abundant, but no trace of pigment was ever produced. Where the potato preparations were most favourable, very typical, moist, practically invisible, growths occurred, and they have remained so for over three months.

Broth.—At 37° C. and at room temperature, as has been noted, a uniform turbidity is produced by actively motile individuals. No pellicle is formed. No indol is produced in nutrient broth free from glucose.

Capaldi's Medium.†—The typhoid-like character of the growth contrasts with the control cultures of colon on the same medium.

Sero-Diagnosis.—As has been mentioned, this organism reacts well to typhoid serum. In fact, I have had a pleasing confirmation of this observation from Dr. A. J. Turner, of Brisbane, who has written to me to say that he is using sub-cultures of this bacillus for serum reactions in preference to those at present in his possession, originally isolated from typhoid spleens. I have myself used it for a large number of specimens of serum sent for diagnostic purposes to the Pathological Laboratory at the Melbourne Medical School during the last six months.

With regard to the other forms picked up (thirteen in all) from the Parietti-gelatine

plates, the majority were abandoned on failing to give the agglutination-reaction. Three of them, however, were investigated, and gave the following coli-reactions:—



The magnification (standardised by a stage micrometer) amounts to 1,000 diameters.

1. The growths in gelatine were abundant, iridescent, with raised borders and crenated edges.

2. On agar the growths were characteristic and heavier than typhoid. They, like the latter, were iridescent.

[In young growths of both these organisms, iridescence is very marked and characteristic. It is best seen by holding the tubes towards a source of light, and letting the shadows, say of the fingers fall, on them from behind. At the junction of the light and shade the play of colours is very beautiful. Older cultures do not show it well, if at all.]

3. They produced acid freely in litmus whey, and coagulated the casein of milk within forty-eight hours.

4. Their growths on potato were creamy and spread rapidly, forming a thickish layer. Discolouration variable.

5. They produced a uniform turbidity in both, and showed characteristic form and a moderate degree of motility in hanging-drops. A pellicle was formed in most cases.

6. They produced indol within a week in broth free from glucose.

7. They readily produced gas in glucose gelatine. None of them reacted to typhoid serum.

* Klein. Micro-organisms and Disease. Flagella Staining.

† Zetich: Für Hygiene, 1896, xxii., p. 476.

The only interest attaching to the milk plates, rested in the fact that from one of them a chromogenic (yellow), non-liquifying, feebly-motile bacillus was separated, of which I have not been able to find any published description.

No coli-forms were found associated with the milk, nor were any isolated from the reservoir water. These are satisfactory observations, but only so far as they go.

All the differentiation tests for the typhoid bacillus, with the exception of the number of flagella possessed by the organism, were completed in Brisbane. Since my return to the Pathological Laboratory of the Melbourne Medical School, I have succeeded in demonstrating numerous flagella on this organism by Dr. M. Gordon's modification of Van Ermengem's process.

From these facts, I feel justified in having reported that the organism was most probably identical with Eberth's bacillus, and in having stated that the tank water in which it was associated with the bacillus coli communis was quite unfit for consumption, and was possibly the origin of the three cases of sickness which were reported to have occurred on the premises.

In conclusion, I wish to repeat that this investigation was not intended as an exhaustive one, and no conclusions can be drawn from it beyond the fact that, in one instance, water from a tank in Wilton Street was contaminated with, amongst other things, the bacillus of typhoid fever.

The illustration is reproduced from a photomicrograph of the organism referred to, stained by Van Ermengem's flagella-staining method. My thanks are due to Dr. John Thomson, of Brisbane, for photographing my slide with such a beautiful result.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY,
LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrschmann, R. Bohrschmann, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Forbes (Ashfield), Foord Hughes (Ashfield), Tayler (Woollahra), Scott (Balmmain), Anderson (Petersham), Patrick (Marrickville), R. H. Collins (Redfern), J. Murray-Gibbes (North Sydney), Hanson (Waverley). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Brereton (Marrickville).

MR. BRUCE can now supply the *New British Pharmacopæia*. Price 10s. 6d.; post free 11s. 3d.

MR. BRUCE has received a full supply of Marmorek's Antistreptococcus Serum. Price 6s. a tube.

AN INTERESTING CASE OF GASTRIC ULCER.

By F. H. QUAIFF, M.D., SYDNEY.

D. D., master mechanical engineer, aged 30 years, of an anxious temperament, subject to the mental worry of maintaining a young and growing engineering establishment situated at Pyrmont, Darling Harbour, had dined at his lodgings, and was running across the railway to the works, when he fell upon the line, and found himself lying there, having lost consciousness and vomited his dinner. He thought he had tripped on the rails, but was not sure. He proceeded to the works, and felt no further effects for a few days. He came up to me one evening soon after, and related the occurrence.

About a fortnight after, he was in a warehouse in the city on business, and lost consciousness—fainted, as the people thought—and was sent home on recovery in a cab. This occurrence also was related to me soon afterwards, but no description of the kind of seizure could be got.

A few weeks after this, his manager came for me one evening, and said that Mr. D. was very ill, that he had been seized with severe vomiting, and kept fainting. On arrival at his lodgings I found him weak and cold, and retching every few minutes; and after each attack he became unconscious, and had a distinct slight epileptiform seizure. There was no pain. The pulse was in a remarkable condition; it slowed down from about 60 to 30 before each fit. There was no trace of blood in the vomit, which was only mucous, or afterwards watery from melted ice. Bowels were habitually regular. The condition became very serious; all the usual precautions were taken, and small quantities of cooled food given, morphia applied on the epigastrium after blistering, etc., but it was found soon that absolute stoppage of nourishment by the mouth, and feeding by the rectum, were necessary. Dr. P. S. Jones saw him with me, and examined him carefully. No tumour or abdominal physical sign could be found, except a little epigastric tenderness, which gradually became less marked. After about a week the attack passed off; the fits and retching stopped, and he became able to take liquid or soft food of various kinds; naturally we kept him on such for a good while. The urine was quite normal, and continued so throughout the case. He stayed in the country (at his parents' home) for several months and gradually improved, but remained anæmic and had occasional small

seizures, the origin of which at the time was not obvious. He returned to his work for a little, but as the weakness and occasional attacks continued, again returned home for some weeks. He then came and stayed at my house during the winter of 1873, and was under my observation for some weeks. One morning after breakfast he was sitting drawing at the table, and in front of the fire. I happened to go into the room, and he told me that he had found himself, a few minutes before, lying on the hearth rug with his head over the fender, and that he had picked his smoking cap, which he was wearing, off the fire. The attack was very short, clearly, as the cap was not burned, and he must have recovered consciousness very quickly. I had begun by this time, from frequent accounts of his doings and feeding, to suspect that there was some connection between the solidity of food and the attacks. He had eaten a chop that morning for breakfast. The pulse always slowed down before or during the attacks. Nothing further happened then. A consultation was held between Dr. P. S. Jones, the late Dr. Fullerton, and myself, and we could find nothing of a palpable nature in the abdomen. Dr. P. S. Jones thought it possible that there was an ulcer in the stomach. He returned to light supervision at the works, and was charged to keep to soft, nearly liquid, food. Under this treatment very considerable improvement followed, and lasted for several months. The pulse came up to 70, and there were no fits.

One afternoon he went with his father to view some property, on the North Shore, of a very hilly nature, and exerted himself more than usual, and tired himself out. Feeling very hungry, and thinking himself very much better, he ate a little fish. He vomited, and had more fits, and his pulse fell to 30, and during the fits went as low as 19; in fact, I could tell when the fit was coming by keeping my finger on the pulse. This attack soon passed off, and he returned to the country, and never came to work again. The pulse kept at about 40, and the heart was found to be enlarging. He was kept rigidly to a soft diet, and the fits were practically abolished. While at home, his father died of cerebral hæmorrhage, and the family soon after came to Pyrmont to live. He remained in much the same state; the pulse at about 40; the heart was very large; there were no murmurs. The apex beat was considerably to the left of the nipple; the area of the beat extensive. About three months after coming to Sydney, early one morning he was heard to groan, and his mother

found him dead in bed. He died in the latter part of 1873.

At my request, and at the wish as well of the family, Dr. MacLaurin examined the chest and abdomen. The heart was found to be enormously enlarged, especially the left ventricle, and the walls were very thick. The lungs were normal, liver and kidneys and all the other abdominal organs, except the stomach, normal. On the posterior wall, close to, almost within, the pylorus, was found a longitudinal slit-like ulcer, about half an inch long. It was not much congested. We concluded that this was the original fault, and that, owing to its position, any stretching of the part by a full meal, especially if there were matter in it not well broken up, irritated the ulcer, and that reflex action inhibited the heart's action through the vagus, slowing it down, and that the fits were consequent on such slowing down. It is certain that, while under observation, they never occurred unless the pulse was lowered to between 20 and 30. He never had any other cerebral symptoms but the epileptic attacks.

Death was probably caused by a sudden attack of extreme slowing down, from which recovery could not take place soon enough to keep life going on.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 29th July, at 8.15 p.m.

Business:—Discussion on the Duties of Medical Men in reporting deaths to the Coroner.

GEO. E. RENNIE, Hon. Secretary.

We cannot too strongly urge upon our readers who cycle, the necessity of always carrying a toolbag with repair outfit, also an oilcan and spanner, with a piece of string and a box of matches. We have seen a very good toolbag called the "silent," which recommends itself because it is neat and strong, and no stitches are used, the whole being strongly rivetted together. It will outlast most of the toolbags we have seen offered for sale. Inside this bag is a piece of felt in which the articles carried may be wrapped, thus preventing them from rattling. The Austral Cycle Agency sell these bags for 2s. 6d., and for 1s. or 2s. more a repair outfit and oilcan will be included.

Whilst examining the goods sold by this firm, we were handed a very neat accessory list giving a description of their novelties, etc., illustrated, and with prices clearly shown. These are sent post free by applying at any of their numerous depots.

The Hon. Librarian, N.S.W. Branch, B.M.A., requires *The Lancet*, No. 3,866, October 2, 1897, to complete series. He would be glad to receive this number, addressed to 121 Bathurst Street, Sydney.

THE ETIOLOGY OF INFECTION.

By T. A. WILSON, M.B., RESIDENT SURGEON
CRESWICK HOSPITAL
READ BEFORE THE BALLARAT DISTRICT MEDICAL
SOCIETY.

THE title chosen for this paper has been suggested by the extraordinary sequence of pathological events that occurred in a case recently under observation, and which at first seemed of so simple a nature as to warrant a good prognosis, and the promise of a speedy return to the former state of health. This happy result, however, did not eventuate, and a serious illness, extending over a period of six months, has been the result, during which occurred several new "infections," each fraught with very grave anxiety as to the ultimate result.

If one desires to study the earliest records of infectious diseases in their relation to bacterial development it would be necessary to go back to the oldest works known, for amongst the earliest practitioners of medicine there were men who held that the invasion of the system by minute organisms was the initial cause of many forms of disease. It was not, however, till the year 1675 that an observer with the crude microscope then in existence, was able to actually demonstrate the presence of infusoria in the saliva. After this date an impetus was given to theorizing as to the exact nature of the "contagium vivum," and in the same century the shadows of coming events, in the later discoveries of Pasteur, were cast by Robert Boyle, who maintained that he who obtained a thorough comprehension of the phenomena of fermentation, would lay the foundation stone for the subsequent interpretation of many pathological conditions in disease, and more especially in the fevers.

In the latter part of the 18th century the study of the fermentative process was being actively prosecuted by many observers, but it was reserved for Caignard-Latour and Schwann to prove, in 1837, that the presence of the torula was the active causative agent in alcoholic fermentation, and that it was not a purely chemical process as was asserted by so powerful an authority as Liebig.

The term "Zymotic," in application to certain diseases, was introduced by Dr. Farr, in 1840, and the derivation of the term shows that he considered they were due to a fermentative process. The first etiological grain separated from the chaff of speculation is to be found in the researches of Davaine, who, in

1850, demonstrated the presence of the bacillus anthracis in the tissues of animals which had died of splenic fever; but the actual relationship of the germ to the disease was then, however, not clearly understood, for it was thought that the presence of the organism might be attributed to "spontaneous generation," and it was not until the mysteries of fermentation were unveiled by Pasteur, in 1858, and by his later discoveries which disproved the theory of "spontaneous generation," that any definite data of practical utility as to the exact part played by micro-organisms in the causation of disease were placed on a footing at once safe and scientific.

And from this humble genesis we find that with the seed so laboriously obtained by the industry of Pasteur and Davaine, an extensive flourishing field in the modern science of bacteriology has been sown from which it would appear that an almost limitless harvest is still to be garnered.

It is not the purpose of a paper such as this to drag on through the successive stages in the development of this new science, which, weak in its infancy, gained strength during the sunshine of its adolescence and has now, it might reasonably be claimed, attained a vigorous maturity, but rather to pass on directly to the consideration of the problem involved in its causal relationship to those diseases of which, as physicians and surgeons, we are daily endeavouring to find a solution in the scientific application of modern methods of treatment, and in formulating rules for the prevention of disease, which is the loftiest and most noble branch on the widespread tree of therapeutical science.

In entering upon the study of the science of bacteriology and its pathological association to the practice of medicine, it is necessary first to review briefly the general morphology and biology of bacteria, so far as it is essential in demonstrating the influence of bacterial life and activity in the production of diseased conditions.

The most generally accepted classification of bacteria is that adopted by Nägeli, in which they are placed under three headings:—(1) Hyphomycetes or moulds; (2) Blastomycetes or sprouting fungi; (3) Schizomycetes or cleft fungi.

In the moulds, the organism is made up of an interlacing network of filaments forming the mycelium, from which extend other filaments known as the hyphae, in which are found the fruit-bearing organs and spores. Variety of form in the mycelium leads to a difference

in the mode of development of the spores. In some forms the terminal cells of the hyphæ undergo transverse division (conidia); in others, enlargement takes place with the formation of a capsule in which the spores are enclosed, (sporangium or ascus); and, finally, two hyphæ may fuse together and conjointly lead to spore development (oospores). A number of moulds are found associated with pathological conditions, but the only one of which we have any definite knowledge of how far its presence is essential in the production of the diseased condition with which it is associated, is the actinomyces or ray fungus, which is pathogenetic for man and cattle.

The blastomycetes or sprouting fungi are large round or ovoid cells, which, as a rule, multiply by budding; and, though usually found as separate cells, they may, under certain conditions form a mycelium, and, in some cases, in addition to budding, they may also be reproduced by spore formation. Of these there are three recognized groups:—(1) Saccharomycetes, which induce alcoholic fermentation; (2) *Torula*, having pronounced fermentative activity; (3) *Mycoderma*, with little fermentative activity. The part played by this group in pathology is not great, though of late, pathogenetic forms of *torula* have been described. They are, however, so widely distributed in our environment that some familiarity with them is desirable owing to the frequency with which they are found in the human excretions.

Amongst the schizomycetes, or fission fungi, are found the majority of pathogenetic organisms; or, at all events, these minute unicellular vegetable micro-organisms embrace all those with whose characteristics and activity, we are most familiar, and which, by the law of custom have, in ordinary medical language, received the generic name of *bacteria*. The routine classification of bacteria in accordance with their morphological distinctions is, strictly speaking, unscientific, but so long as the exact relationship of one form to another is not thoroughly appreciated, it can fairly be claimed that such a provisional classification, which is at once simple and practical, is to be permitted, and in its adoption we divide the generic group of bacteria into three sub-divisions, viz.: Cocci, bacilli, and spirilla. The cocci or micro-cocci have a constant spheroidal form, and always remain cocci; they may be sub-divided according to their arrangement or grouping—(1) Diplococci, or arrangement in pairs, which, in the case of the pneumococcus are encapsuled, or they may be without a capsule as the gonococcus; (2) Streptococci, in which they are

arranged in chains, which may be short or long, the shortest consisting of two component members; (3) The Tetracocci, are grouped in fours, and often enclosed in a capsule; (4) The Sarcinæ are made up of packets of eight or more component members; (5) Arrangement of colonies of cocci in irregular clusters or unsymmetrical heaps are termed Staphylococci.

On reviewing this subdivision of cocci, it is at once evident that there is no constancy of arrangement, although it is equally apparent that the constancy of individual form is always maintained. For example, diplococci may develop into either streptococci or staphylococci; tetracocci may form staphylococci; but in every case streptococci always remain as streptococci, and, conversely, staphylococci are never converted into streptococci. Colonies or clusters of staphylococci bound together by a tough mucous material are termed zoogloæ.

The bacilli are rod-like structures, which may be short and plump or long thin and graceful, with sharp or blunted ends, and may be arranged in pairs, in chains of varying length, or filaments. Klein asserts that the bacilli of tubercle and diphtheria show a tendency to form mycelial threads, whereas, on the other hand, the mycelium of actinomycosis, when grown artificially, passes through a bacillary phase before it becomes a fully developed mycelial structure. Such variations of form or pleomorphism are sufficient to remind us of our as yet imperfect knowledge of bacterial morphology. Among the spirilla are grouped all the curved and spiral forms. Slightly twisted bacteria or curved bacilli are called vibrios, or comma bacilli, and these, as an example of pleomorphism, may easily change into true spirilla, and further, the spirilla may lose their curved appearance and assume the form of straight bacilli.

In considering the chief morphological features of bacteria we have to deal with either those recognised as specific characters, or of biological importance. These are—(1) Spore formation. (2) Flagella or cilia; (3) Involution forms; (4) Pleomorphism and variability. For the purpose of this paper it would be tedious and, in fact, unnecessary to here enter into a detailed description of the higher and more specialized form of proliferation by spore formation, and equally as unnecessary to describe the part played by the flagella in those bacteria which possess the power of spontaneous locomotion.

Consideration of the involution forms, of pleomorphism and of variability, are those features to which I wish briefly to direct your attention, and by annotating the sequence of

events in the case previously mentioned, to endeavour to show either how one septic disease may pass on to another, or how they may co-exist in the same individual, the symptomatic resultant being their hybrid reproduction instead of a "specific" disease.

In the bacterial world the use of the term "involution" means that we are dealing with forms of degeneration, and this may be amply illustrated by noting the changes that take place in bacilli or the vibrios.

They are often found so altered in shape as to be quite unrecognizable; this may be due either to their age, exhaustion of the pabulum on which they are cultivated, or some harmful influence in their environment.

For example, the vibrio of Asiatic cholera after a time may become bacillary or coccoid, in shape, or again bacilli may become longer or shorter, or may assume a beaded or varicose contour. These retrograde forms will, unless so old and debilitated as to be beyond recovery, if placed in a fresh culture medium under appropriate conditions assume their original shape and structure. In healthy, young, and vigorous colonies may be found abnormal or unusual forms, but these must not be mistaken for involution or degenerated forms, as we have either a pleomorphism or a reversion from a retrograde form to an ancestral type—that is, the culture may be a mixed one, and in it there may be one form which having been languishing under the baneful influences of unsuitable environment, is now convalescing when placed under the advantages of more favourable conditions in soil and surroundings. In his original work Koch upheld the doctrine of constancy of form, and in a general sense this teaching still holds good as most pathogenetic organisms adhere to one type or form, but it is now recognised that many micro-organisms have a decided tendency towards variation. Thus we find that the vibrios often become spirilla; the ray fungus may pass through a coccoid and bacillary stage; the bacillus of diphtheria may either be long, short, straight, or clubbed. A streptococcus however, never becomes a staphylococcus or a bacillus, but as a streptococcus it may vary, growing either in long or short chains, sometimes as fine dots, and at other times as larger and plumper cocci. This diversity of shape among organisms of the same species is called pleomorphism or polymorphism, and the terms are used simply to imply individual differences, and must be carefully distinguished from variability. Pleomorphism is a character belonging to a species, and may be handed on from one generation to another, whereas variation of individual micro-organisms

depends on environment, and some species under the influence of adaptation may be more readily changed than others, and this change, whether in form or function, may be either temporary or permanent.

Having briefly reviewed the chief morphological characters of bacteria in general, it now remains only to deal with the all important question of the part played by micro-organisms in the production of diseased conditions, for it can be no longer doubted but that the science of bacteriology has caused our knowledge of the etiology of many forms of infectious disease to pass from under the dark shadows of hypothetical ignorance out into the bright light of scientific truth.

In applying the term "pathogenetic" to disease-producing micro-organisms it can only be accepted as a relative one, because—(1) An organism which, when injected into one animal will produce a diseased condition, may be quite harmless when similarly applied to a different animal; 2. An organism which, under certain conditions, might be harmless, may, under certain special conditions, produce disease; 3. An organism which by itself would not cause disease may, in conjunction with or assisted by another organism, produce serious mischief; (4) Conversely, the pathogenetic power of one organism may be inhibited by the presence of a different organism.

The diseased conditions produced by pathogenetic bacteria may be—(1) Local or general; (2) Specific or non-specific.

When the lesion produced is local, the micro-organisms remain in the infected area, and there undergo proliferation with the production of toxins, or they establish fermentation. The poisons which consist, either of the secreted toxins, or of the products resulting from the fermentative action of the organisms on the tissues are absorbed, and lead to special symptoms and constitutional disturbances, or they may further re-act locally on the tissues leading to necrosis or destruction. Diphtheria is a good example of a disease of this class, for in it we find there is first the local action of the bacteria on the tissues involved with the subsequent absorption of the deadly toxins and products of decomposition, the entrance of which, into the circulation, leads to a septic intoxication with the production of the serious constitutional symptoms of the disease. On the other hand, when the bacterial lesion is a general one the organisms will be found, not only in the tissues, but also in the lymph channels and general circulation. Here the condition is one of septicæmia, of course using the term in the strict pathological sense, and

not giving it the usual clinical signification. The poisons and toxins are formed directly in the blood itself, so that the condition is a septic infection, and is usually productive of more alarming symptoms than those of intoxication produced by the absorption of poisons produced *in situ* in an essentially local disease. Again, the mechanical presence of bacteria in the blood stream may lead to a breach of continuity in the endothelial lining of the vessels, and so favor thrombosis or embolism.

A lesion, which at first is local, may for some reason become general — thus a suppuration may change into a general septicæmia; a pneumonia may be followed by an infective endocarditis, and this in turn by a general septicæmia; or a caseating bronchial gland may be the starting point of a general miliary tuberculosis. These matters are not without a clinical importance, inasmuch as they influence not only diagnosis, but also prognosis. For example, in pneumonia, the prognosis would be much more grave and guarded on the discovery of diplococci in the general blood stream, when we bear in mind that its presence may cause not only ulcerative endocarditis, but may also lead to a general septicæmic infection.

Many pathological conditions are so uniformly characteristic in their appearance and so symptomatically distinct as to be at once recognised, and when in such conditions is found the invariable presence of a particular organism, the disease is called "specific." For example, tetanus is marked by unmistakable signs and symptoms, and is invariably due to the action of one specific pathogenetic micro-organism, the bacillus of tetanus. In the absence of this bacillus there can be no tetanus, and it is only an expression of ignorance on the part of those who still patter about "idiopathic" tetanus.

In all specific diseases, such as glanders, leprosy, anthrax, typhoid, and diphtheria, the lesions severally produced are due to the presence of one particular organism, the presence of which is essential.

Possibly, the majority of diseases induced by bacterial activity are specific in this sense, but still, on the other hand, it cannot be correctly assumed that they are all due to the action of a specific micro-organism. Ulcerative endocarditis, owing to its characteristic pathological and anatomical changes is often regarded as a specific disease, but clinical observation, assisted by microscopical research, conclusively proves that it may result from the action of various micro-organisms, such as the pyogenetic staphylococci, and the streptococci of suppuration, erysipelas and pneumonia. Suppuration may be produced by anyone of a large

number of bacteria, and in the condition clinically recognised as erysipelas other organisms are often found instead of the streptococcus of erysipelas.

It will thus be seen that a distinct pathological process may in one individual be brought about by the presence of one form of bacterial life, whereas in another individual the same condition may result from the activity of a distinctly different micro-organism.

From this it will be evident that diseased conditions may have a clinical and pathological identity without having a bacteriological identity. The converse of this also holds true, for the organism which in one individual will produce a certain disease, may in another produce a totally different condition, so that it is possible in diseased conditions to have a bacteriological identity without a clinical and pathological identity. It will thus be seen that it is not altogether beyond the power of the bacteriologist to reconcile, if not entirely remove, the difference, often more imaginary than real, which at times exists between the clinical observer and the student of morbid anatomy.

The abridged notes of the following case will supply an example of how difficult it often is to give a prognosis as to the course which may be taken by an apparently simple pathological condition. They will also show that as regards "septic diseases" one is not altogether unsupported in asserting that they cannot be classed as "specific diseases," for although they may be clinically and pathologically distinct, they may have a bacteriological identity. To my mind the different "infections" that occurred in this case resulted from the presence and activity of some one of the many forms of pyogenetic streptococci.

G. S., female, *æt* 45, was admitted to the Creswick Hospital, on the 28th August last, for deep cellulitis in the posterior triangle on left side of neck. An incision was made through the deep fascia, and about 4 ozs. of pus evacuated, after which abscess cavity lightly curetted, irrigated with perchloride solution, drain tube inserted and hot boracic fomenta applied. The wound discharged freely for two days, and then tube shortened. The temperature having come down to normal, she was up and about for two days before leaving the hospital, of her own accord, on the 4th September. She had to walk about a quarter of a mile to her home, but on the way was taken suddenly ill, and called in to a neighbour's house, where she had a rigor. From here she was conveyed home in a cab, and Dr. Lewers, her ordinary medical attendant, called in, who, on examining her, discovered evidence of

pneumonia in the left apex. This, however, was never very extensive or serious, but there was still considerable constitutional disturbance as evidenced by the temperature and general condition. On the 6th September, she complained of pain about the left knee joint, and on seeing her in consultation on the 8th September, she then had a temperature of 103° , pulse 120, with considerable swelling about the joint. Having previously gone through two attacks of rheumatic fever, and as there had been no rigor subsequent to that ushering in the pneumonia, the diagnosis lay between acute monarticular rheumatism and pyæmia. She was put on a mixture of soda salicyl. and pot. bicarb., but owing to the speedy onset of head symptoms the salicylate had to be discontinued, and the treatment by alkalies persevered with. On the 16th September, in the absence of Dr. Lewers, I was called in to relieve retention of urine, and following this it was necessary to use the catheter for about a fortnight, and also to treat an irritable state of the bladder and urethra. Almost immediately after the cessation of the urinary symptoms she developed an attack of facial erysipelas, which under appropriate treatment, gradually subsided. The condition of the knee-joint not improving, and having no chance of efficient nursing at home, she was re-admitted to the hospital on the 4th October. There was then considerable swelling about the joint, which over the patella measured $16\frac{1}{2}$ inches, or $2\frac{3}{4}$ inches more than the sound limb at the same situation. The muscular tissues for some distance above and below the joint were much indurated, but no fluctuation could be detected. There was also a recurrence of the urinary trouble with frequent and painful micturition; temperature, 99° ; pulse, 100. Positive evidence as to the exact location of suppuration being absent, it was thought advisable to delay operative treatment, and the leg was put up on a back splint and a mixture of pot. iod., pot. bicarb. and tr. bellad. was ordered. After a week of treatment as described, though still a good deal of temperature, the patient had much improved in general appearance; pain, of which there were no night exacerbations, had eased considerably, brawny feeling of muscular tissues above the joint had almost gone, and measurement over joint had decreased half an inch. On 18th October, she complained of pain on pressure along the lower third of the femur, and now fluctuation gave evidence of a fluid collection under the rectus muscle. After rendering surface of limb thoroughly aseptic, an aspirating trocar was inserted under the rectus muscle, and about 6 oz. of pus evacu-

ated; the canula was left in and boracic forments applied. The swelling below the joint still persisted, and on the 22nd October, assisted by Dr. Lewers, after thoroughly disinfecting the limb, an incision was made on the outer side above the joint, and some curdy pus evacuated. The under surface of the patella was felt to be smooth and quite free from erosions. Wound was washed out with warm boracic solution, and gauze drain inserted, after which dressed with iodoform gauze and salicylic wool. An incision was now made on the inner side below the knee, and a large quantity of pus evacuated from an abscess cavity extending deeply into the popliteal space, but not communicating with the knee joint. This was irrigated with perchloride solution and a large drain tube inserted, gauze and wool dressing being afterwards applied. The patient stood operation badly, but soon rallied on being put to bed and packed with hot bottles. Next morning was much improved, had a good night's rest, and temperature normal. The wound on the outer side soon closed, and the discharge from the cavity in the popliteal space gradually decreased with improvement in the general condition, which continued up to the 2nd December, when she had a rigor, and temperature which was normal at 4.30 p.m. had gone up to 103.6° at 7.15 p.m., when I was called to see her by the nurse. There was then a slight blush around the site of incision on the outer side of the leg, and next morning it had extended widely both up and down the limb, and there was a recurrence of pain and difficulty in micturition. This attack of erysipelas soon cleared up under appropriate treatment, and was speedily followed by a complete filling in of the cavity opened on the inner side of the leg. From this out she continued to improve, and was discharged from the hospital on the 21st February.

The report of this interesting case would be incomplete if I failed to record the very material auxiliary assistance I have had from Mr. Hilson, who undertook the systematic and regular massage of the limb. After the wounds had completely closed in, there still remained a good deal of pressure œdema extending from the knee down to the toes, besides considerable organic thickening about the joint and in the intermuscular tissues. This, however, was largely under massage treatment, rapidly dispersed, and though considerable diminution in the range of movement of the joint still persists, we are yet hopeful that massage, combined with passive motion, will eventually restore the limb to a fairly normal condition.

Creswick Hospital, Vic.

THE PHONOGRAPH IN MEDICINE.

By R. S. ROGERS, M.A. ADELAIDE, M.D.
EDIN., ADELAIDE.

It is now sixteen or seventeen years since Edison invented the phonograph, and yet, after this long lapse of time, it is not included in the complete outfit of the physician. Medicine, so enterprising in most things, has not claimed its services. This has often been a matter of surprise to me, but since I became the possessor of one of these instruments, I can, to a certain extent, understand why this should be the case. There are defects in its construction which seriously limit its application in medicine. Nevertheless, even in its present form it has its sphere of usefulness, and, as the defects referred to do not seem irremediable, I believe that this sphere will become widely extended in the future. Our profession is to blame for not sufficiently pressing upon the scientific world the possibilities of this machine with the special view of its adaptation to medicine.

It is the purpose of this article briefly to indicate its present capabilities, and at the same time to point out some of its potentialities in this particular domain, in the hope that the requisite mechanical skill may be forthcoming to remedy those defects which render it unsuitable for diagnostic purposes.

1. *Its present scope.*—Defects in speech can be recorded with great facility. The scanning speech of bulbar paralysis, the staccato speech of multiple sclerosis, the stammering speech of general paralysis, and the recurring utterances of ataxic aphasia may be faithfully reproduced in the lecture-room or elsewhere. Pathological changes in the voice afford another small sphere of application. Cough can be reproduced with great fidelity. Thus the cough of laryngismus stridulus, pertussis, of croup, bronchitis, pressure on the recurrent laryngeal nerve, etc., are all of diagnostic importance, and may be permanently preserved for medical purposes. The wheezing of asthma, stertor, and Cheyne-Stokes breathing will also leave their tracings on the cylinder. There is no difficulty whatever in obtaining phonographic records of such things as the characteristic cry of meningitis, pathognomonic forms of delirium, and the utterances of the insane. All these may have a scientific value. Even if the scope of the instrument were limited to the above, it must be regarded as a useful adjunct to the lecture-room. It is also, as I shall presently show, distinctly valuable for purposes of consultation, and may even be of use in medical

life assurance. It has, however, other potentialities which I hope before long to see realized.

2. *Its potentialities.*—Auscultatory phenomena are not recorded satisfactorily by the machine in its present form. The instrument with which I have experimented is known as the graphophone, and for all purposes under the previous heading it works exceedingly well. With it I have also succeeded in recording the beats of a normal heart and of a diseased heart. An irregular heart with fairly well-marked beats will come out clearly enough, though, even here, one requires (like the tyro in stethoscopy) a little practice. The noise of the machinery is very distracting, and allowance must be made for this, much in the same way as the breath sounds are discounted in cardiac auscultation. Accentuated cardiac sound, or even reduplications, are well heard, but cardiac murmurs and vocal resonance (pathological or otherwise) are not audible at all. In attempting to record loud râles in an advanced case of phthisis, I was met by a curious result. On listening attentively, the râles could be heard during the period corresponding to inspiration. Expiration was represented (or unrepresented) by a blank—silence. Friction sounds I could not pick up, even in very well marked cases. All this might have been very different had it not been for the noise of the machine, which completely drowned the fainter sounds and made it somewhat difficult even to hear loud ones. In the machine which I possess (and I have noticed it also in others) there is an important defect which might be easily remedied. The driving-wheel is not absolutely in a vertical plane, and is not exactly set at right angles to the axis of the cylinder-carrier. The latter also is not quite horizontal. This defect is practically of no importance in taking ordinary records, but in auscultatory phenomena it is exceedingly confusing. At each revolution of the wheel there is produced a thump which results in a rhythm not unlike that of the heart. This, of course, adds a very unnecessary difficulty to our list. A much more serious difficulty, however, is to be found in the noise of the machine itself. This noise is greatly augmented by the stethoscope, which it is necessary to attach to the reproducer. It has occurred to me that it might be very considerably diminished by some method of careful insulation of the driving apparatus from the reproducer, and also, perhaps, by the employment of compressed paper cogs instead of metallic ones. If we could obtain a perfectly silent machine, the greatest barrier to the

recording of auscultatory phenomena would, I believe, be cleared away. There is another improvement which might perhaps be made with comparative ease. I refer to the thickness of the diaphragm both in the recorder and reproducer. Efforts should be made to manufacture these as thin and as sensitive as possible. The microphone might find an application here.

In my attempts to record auscultatory phenomena, I have made use of the phonendoscope rather than the ordinary binaural, as the former is a more sensitive instrument. I remove the cap and the ear pieces, and attach the two rubber tubes by means of a vulcanite Y to a single tube (which is supplied with the phonograph), and which fits by a rubber plug into the recorder. When reproduction of the sounds is required, the tubes of the phonendoscope are removed from the Y, and the tubes of an ordinary binaural applied instead.

I have already expressed the opinion that the phonograph would be a useful adjunct to the lecture-room. It has, however (especially if it should be suitably modified for auscultatory purposes), a still more important application in life assurance. Cases frequently happen where the medical referee of a company has doubts as to the judiciousness of a recommendation of one of the society's examiners. A cylinder recording the tracings of some doubtful point involving diagnosis or prognosis would then be of immense value in enabling him to come to a decision. It would be time-saving and infinitely more accurate than the most carefully written description. A correspondence might be tinged by the examiner's personal opinion. A cylinder is devoid of prejudice. This cylinder could be sent to the referee, kept for purposes of reference, or returned by post at the cost of a few pence.

Similarly, in the case of the isolated practitioner who, being shut out from the advantages of an ordinary consultation, seeks the advice and opinion of his city confrère. Or let us take the instance of the station hand who, living hundreds of miles from medical aid, has his fears aroused as to the condition, we will say, of his heart, but has neither money nor time to risk what may after all prove an unnecessary journey. What a boon would a phonograph be to such? And let it here be understood that I am not recommending a costly and intricate purchase, beyond the resources of the poor or uneducated layman. It is only necessary that a demand should exist and phonographic machines can be placed on the market so simply constructed that they

will not confuse the most ordinary intelligence, and so inexpensive that they will be within the reach of every working-man.

NOTE.—Since writing the above article, Reeves & Co., of Adelaide, have informed me that they supply not only the graphophone referred to above, but also a phonograph which is comparatively silent in its movements. The cost of the latter (£45) seems to me at first sight a bar to its general application. I have been promised the opportunity of conducting some experiments with this larger instrument at an early date.

INFLUENZA.

By H. POLLEN, M.D., WELLINGTON. N. Z.

(READ AT THE ANNUAL MEETING OF THE NEW ZEALAND BRANCH OF THE B.M.A.)

It was suggested at a preliminary meeting of the local Section, held to arrange a programme for the annual meeting of the Branch, that the subject of Influenza was a good one to insure a discussion; and also that one of the hon. physicians to the Wellington Hospital ought to introduce it. I felt sure my friend Dr Anson would have been willing to undertake the task, so I promised the Secretary of the Council, if he failed to obtain Dr. Anson's valuable services I would do what I could to fill the gap. I was sorry for my promise on learning last week that Dr. Anson was away on his holiday, and unable to prepare a paper, but am here this morning to fulfil it.

To my mind, the subject of Influenza, in all its branches, teems with interest to the physician and pathologist. On its history alone there has been a vast amount of fascinating information collected and published since the European epidemic of 1889-90 revived the interest in this peculiar disease, which the previous forty-two years' exemption from its ravages had almost quenched. Careful study seems to have established beyond a doubt the identity of up-to-date Influenza, with a disease of its nature described as epidemic in England in the early part of the sixteenth century, and to have rendered it probable that there had been epidemics for centuries before. Certainly, a description of the disease by Huxam, in 1773, might have been written in Wellington last December as a description of the majority of our cases. Huxam, writing 120 years ago, says: "It begins suddenly with slight shivering, followed by transient erratic heats, headache, sneezing, pains in back and chest, violent cough, a running of thin mucus from the throat and nose, racking pains in the head, singing in the ears,

and pains in the meatus auditorius, where sometimes an abscess forms. Ulcerations and swelling of the fauces were also common. The sick were in general much given to sweating, which broke out of its own accord, was plentiful, and, continuing without 'striking in' did often, in two or three days carry off the fever. It was rarely fatal, and then mostly to children and worn out old people. Generally, it went off about the fourth day, leaving a troublesome cough, often of long duration, and *such dejection of strength as would hardly be expected from the shortness of the time*. The cough in all, was very violent, hardly to be subdued by anodynes, and was so protracted in some cases as to throw people into a consumption, from which they died in two or three months afterwards." This is a most faithful picture, and, as I said, true to-day, with the exception perhaps, of the statement that it is rarely fatal; but no doubt the toxin acting on the already exhausted nerves of the harassed brain worker and breadwinner of our day, accounts for the increased mortality, and furnishes another instance of degenerate modern man.

Shortly, the history of epidemics of Influenza during the past three hundred years seems to have been sudden outbursts, often severe, and always attacking a large proportion of the population. After some weeks the epidemic exhausts its force, but recurs at longer or shorter intervals, till at last it disappears altogether for ten, twenty, thirty, or even forty years. Surely this history alone is enough to raise questions of causation and pathology of the most intense interest, and to justify the vast amount of literature on this part of the subject which has been published of late years. I do not profess in this short paper to bring out anything new about the subject of Influenza, but merely to call fresh attention to a few well known facts, for the purpose of discussion, if so desired, by members.

The suddenness of the invasion has always been a marked feature in Influenza epidemics. In Wellington, towards the end of last November, it seems to have broken out almost on a certain day, a fact I noticed at the time by the sudden influx of lodge patients. These ladies and gentlemen, as you all no doubt know, take the very earliest opportunity of seeking medical advice, and are generally a fair gauge as to the amount of sickness prevalent in a town or city. There are scores of interesting points connected with the suddenness of the invasion and spread of Influenza. The one, I think, which strikes most people is the difficulty of explaining the simultaneous outbreak of epidemics

in widely distant countries, and in ships and steamers far away from land. These facts have led to vague statements about the atmospheric origin of the disease. Dr. Goodhart, in an article "Clifford Albutt's System of Medicine" writes on this very point, and explains it by early sporadic cases having been overlooked. He says: "It is certain the incubation stage of Influenza is very short indeed; that the disease is contagious from man to man, and that the contagion is carried about by fomites, and that it is by these means the disease is spread." He says that the invasion of a country or district is not so sudden as has been thought at first; as an example he goes on to say that in the English epidemic of 1889-90, the disorder apparently befel us on a certain day in the last week of December 1889, but it is now known that cases had occurred in England several weeks before. His own notes, he says, confirms this, for he had treated several cases in October, which had puzzled him at the time, but which he knows now to have been influenzal. "So also, when the outbreaks which have occurred in ships far from land, have been carefully inquired into, the evidence is never free from the suspicion that the isolation was not so complete as was currently reported. Those few towns and villages which escaped in England in the almost pandemic referred to, were remarkable for their remoteness and inaccessibility, curtailing within the narrowest possible limits intercourse between those within and those without their borders. On the other hand, in instances far too numerous to mention, the disease has started and spread rapidly from the date of a person going from an infected area to either a healthy house, village or institution." In Wellington, in 1890, several of the doctors had similar experience of overlooking earlier cases, and one local practitioner, Dr. Rawson, told me last week, that he well remembers having pestered our then President with descriptions of a strange disease he had discovered, until, in retaliation, that worthy gentleman unfeelingly referred to them as "descriptions of a marked case of morbus Rawsonii."

No doubt, Dr. Goodhart's explanation of the outbreak of Influenza in remote places is to a large extent the true one, but that it is absolutely true a great many experienced observers deny, and suggest that there are other factors than fomites and personal contagion at work to spread so generally and suddenly this peculiar poison. This, as I said before, is a fair subject for discussion, and one of the many interesting questions connected with the disease under consideration. With regard to the epidemic

here last December, and to which, according to our programme, I am supposed to make special reference, I must say at once that there was nothing very unusual about it. For the third or fourth epidemic since 1890 it was pretty severe, epidemics of Influenza having, it is stated, a tendency to get milder and milder until taking their long holiday. It certainly came on very suddenly; whole households were laid up simultaneously, no one being left well enough to light the fire in two large families I attended. It was very general, having, as usual, a preference for those previously attacked, but with many exceptions in this particular in my practice, suggesting exhaustion of soil at last, much to the delight of the former sufferers. Our December epidemic was sudden, sharp, and general; but what I noticed most was the large number of cases presenting nervous symptoms alone. In the English epidemic of 1890, it was observed, towards its latter part, that the catarrhal form of Influenza, which represents the popular conception of the disease, was often altogether absent, and that intense depression—amounting in some cases to extreme melancholia, followed by suicide—and complete exhaustion were the only symptoms present. Dr. Althaus calculates that more than half the cases in that epidemic were of what is called “the nervous form” of the disease. In our late epidemic Dr. James had two cases, in male adults, which were ushered in with violent delirium, but without any fever and with slow pulse. These cases were interesting, and suggest a question of the frequency of apyretic Influenza—Influenza with all the typical symptoms, but no fever. There seems to be a good deal of evidence that this condition is not uncommon, for a number of cases have been reported of severe Influenza with a subnormal temperature all through; and, indeed, one well known English practitioner goes so far as to state that “typical Influenza has no fever.” This is, of course, not true, as the experience of most of us can testify. But all the same, we can well imagine a strong poison, such as the influenzal toxin is at times, so hurtful to the nerve-centres as to alter the heat-regulating powers, and produce subnormal temperature from first to last. We see this effect in cholera and diphtheria. There is one thing about the fever in Influenza which I think is not open to much doubt, and that is, that there is no parallelism between the degree of fever and the severity of the illness as is the case in the eruptive fevers and other acute diseases. A high fever at the onset does not imply a coming severe attack, for the most

alarming symptoms have occurred in cases where the temperature has hardly risen at all, remaining at from 99 to 100° all through. Even the onset of pneumonia is not always marked in Influenza by a sudden rise of temperature. In nearly all the cases I saw during last summer there was the typical suddenness of onset of the disease, the “dead felled” condition which so many writers have ably described. Dr. Goodhart illustrates this suddenness of seizure by two interesting cases. He says: “A medical man went to bed in his usual good health, got up to void urine, fell to the ground, and was so weak he could not get into bed again without assistance. In another case, a man was in his dog-cart driving, and quite well. He suddenly fell out insensible, was picked up, drove himself home, and though he had broken a rib remembered nothing of the drive, and was so dazed on arrival home that he wanted to get into bed with his boots on, and was thought to be intoxicated in consequence.” There can be no doubt that the nervous phenomena of Influenza are the most bewildering, as well as the most interesting features of the disease. In the recent epidemic I noticed several cases in the early stage of alarming drowsiness, a symptom which evidently did not escape the notice of older writers, as one of the old synonyms of Influenza was “the sleepy sickness.” In a recent English epidemic, Braun and others wrote about this vagary of the disease. Far more common, however, is the opposite symptom of excessive sleeplessness, owing to the racking pains in the head which drugs, even in heroic doses, sometimes fail to subdue. Of the other nervous symptoms I noticed last December there was nothing unusual. The ordinary intense initial headache, extreme depression, and the various forms of neuralgias were well in evidence in most cases. Of the neuralgias, the most common in my practice was, I think, the intercostal form—a form which often suggests more serious lesions by the respiratory disturbance it causes. As a result of influenzal toxin, a good many cases of localized, and even multiple neuritis have been published. Gowers says influenzal neuritis attacks the face only in most cases, and that the disturbance of sensation is slight. Dr. Westphal relates a case on the sixth day of Influenza of weakness of the limbs, followed rapidly by complete loss of power in all the limbs and both sides of the face, with only slight disturbance of sensation. There was in this case the peculiar cedema of the extremities met with in multiple neuritis, but complete recovery

in six weeks. Amongst the other phenomena I noticed in December was one of excessive giddiness coming on as an early symptom and lasting for two months after; the patient was otherwise convalescent. I saw one case of herpes zoster coming on early in the disease, and two cases during the tardy convalescence of severe attacks. I had one case of long-continued subnormal temperature with great debility, but, strange to say, a most extraordinary appetite and tolerance for alcohol in a patient previously a small eater and almost total abstainer.

I will now consider for a moment the other varieties of Influenza—the catarrhal and gastric group; but, before doing so, I would like to say this division is perfectly arbitrary, as there are no true pathological characters to distinguish them, a blending of all the characters being the rule. The toxin, however, no doubt, seems to select a certain organ to spend its force especially on in some epidemics, and the division into nervous, catarrhal, and gastro-intestinal Influenza has been sanctioned by many eminent writers. Under the heading of catarrhal symptoms, I may say that pneumonia was fairly prevalent during the late illness here. It was of the usual “influenzal variety,” asthenic in type, insidious and slow in its development, rarely ushered in by rigor, cough slight, and characteristic sputum often wanting, and dulness not marked, the crepitant râles alone telling the tale. I saw, however, a few cases of typical, well-marked pneumonia, but these were post-influenzal. A great deal seems to have been written on the eccentric character of the pneumonia of Influenza, but time does not permit me to refer to it. Pneumonia seems to have been very prevalent and fatal in the English epidemic, for Dr. West, of Bartholomew’s, says: “It laid heavy hands on the young and strong, and its mortality was great; in fact,” he says, “there has been no disease of recent years which has carried off so many persons in the full vigour of life at a time when they were most useful to society, and could least well be spared, as influenzal pneumonia.” An interesting question to my mind about pneumonia in the early stage of Influenza is its causation. To which bacillus does it owe allegiance, or are there two kings in Israel at the same time? In spite of the classification of Influenza, there can, I think, be little doubt that in nearly all cases you have more or less gastro-intestinal disturbance. I have, however, seen some cases in which the digestive organs seemed to have escaped the morbid influence, that is, while the

patient was extremely ill, horribly depressed, and in great pain, the tongue remained clean, the appetite was not lost, and bowels were normal; but these were rare, though Dr. Althaus says they occur in thirty per cent. of the cases. On the other hand, in our recent visitation there were cases where the toxin seemed to expend all its virulence on the gastro-intestinal tract, as evidenced by excessive vomiting, abdominal pain, and alarming diarrhoea. The mortality here in December and January was small—a few feeble children succumbed from chest complications, and several middle-aged and elderly people from pneumonia, bronchitis, heart failure, and kidney trouble. In Dr. Rawson’s practice there were two deaths from meningitis. Symptoms came on early during an attack of Influenza in healthy young adults, and terminated fatally before the end of the second week.

As to the diagnosis of Influenza, the suddenness of the onset, early prostration, the characteristic tongue—flabby and large with a thick coating of creamy, dirty, white fur—little accelerated pulse, and indefinite type of pyrexia, all help, if other symptoms fit in, to distinguish Influenza from typhoid, a disease for which it is most frequently mistaken, the difficulty of differential diagnosis being increased when the spleen is enlarged, as it is sometimes in Influenza. A good many cases were admitted into the Wellington Hospital diagnosed as typhoid, which turned out to be simply influenzal in type; but, of course, it is possible for patients to have typhoid following Influenza. Influenza occurring, as it frequently does, during the puerperium may readily be mistaken for sepsis or acute sepsis, and an unfavorable prognosis given. One diagnostic symptom of Influenza, though not always available in the early stage, is the well-known loss of taste and smell. This I believe is peculiar to Influenza.

As to the treatment of Influenza, there is no known specific. There are scores of remedies, infallible and otherwise, recommended, but the disease runs its course in spite of them all. That early to bed is early to rise is even more true of Influenza than it is of typhoid, I am quite convinced. Yet how many patients do we see who refuse to do what they call “giving in to it,” until some serious complication compels them to surrender. Medical men are often the greatest sinners in this respect, and go round seeing patients when really ill themselves, with an increased temperature and symptoms and feelings of bodily and mental exhaustion. I need hardly point out that such

behaviour is neither fair to themselves nor to their patients. *Rest in bed until undoubted convalescence commences is, to my mind, the main factor in the treatment of Influenza.* Some preparation of opium for the pain and restlessness, and an ordinary diaphoretic mixture, are the only medicines I use in the uncomplicated early stages. The salicylates I have been sadly disappointed with. They, I think, undoubtedly increase the depression without any corresponding benefit. Quinine, no doubt, in the later stages, when neuralgias are present, does good; but I think its use as a routine remedy is a mistake. The popular remedy in Wellington in the summer was whisky and quinine. From the effects of an overdose of this mixture, which was generally dispensed in the hotels, I saw several serious symptoms. The whisky and quinine, plus the Influenza toxin, produced a condition very much allied to delirium tremens. That whisky in full doses temporarily reduced the intense headache I had some evidence, but also undoubted evidence that the last stage of the partaker of that agreeable medicine was worse than the first. So that I now say with the emphasis of experience don't give alcohol in the early stages of Influenza. Some of the public consider Influenza "not much of a disease," and that it is a bogey of the doctors; however, those who have had personal experience of even mild attacks change their opinion quickly and permanently. Medical men, too, I am sorry to say, and especially our friends the surgeons, are inclined to treat Influenza lightly as a mild disease. Nothing could be more fallacious. Even if the mortality table and the recorded cases of permanent ill-health after attacks does not impress, surely a disease which can number amongst its sequelæ such a list as the following must at least claim our respect. The recorded sequelæ of Influenza include cases of mania, melancholia, general paralysis, meningitis, neuralgias of various kinds, neuritis, optic neuritis followed by optic atrophy and amaurosis, other various ocular troubles, middle ear disease, laryngeal affection, diabetes, phthisis, pneumonia in every form, bronchitis, pleurisy, empyema, abscess in the lung, ulcerative endocarditis, myxœdema, acute pemphigus nephritis and orchitis, and many others.

This list is my excuse for this paper, which I am conscious is of an elementary character and does not do a tithe of justice to the subject it professes to treat of.

RAPIDLY FATAL TERMINATION OF A CASE OF DIABETES MELLITUS.

By R. G. COOKSON, L.R.C.P. LOND., TEMORA, N.S.W.

I WAS called to see W. D., aged 25, a farmer, at 12 a.m. on June 20th. From his personal statement, I learnt that he had been healthy up to two months ago, when he consulted his lodge doctor for a gumboil, which was lanced. Since then he has been gradually getting weaker and thinner, and more listless. He was able to get about until June 18th, when he took to his bed. For some weeks he had suffered from great thirst, but his appetite had been good until the last few days, and he had noticed that he was passing large quantities of water. He had never placed any restrictions on his diet, and had always been fond of sugar, of which, latterly, he had consumed more than usual. For his thirst, on the advice of a friend he was drinking vinegar and water. There was no history of previous illness or accident, and the family history was good.

On examination I found great emaciation, pupils dilated, but sight good. Tongue and fauces red and irritable-looking, sordes on the teeth, and breath foul. Bowels not open for seven days. Skin harsh and dry, with a dry eczematous eruption on back of right hand; there were a few boils on the face and neck. Temperature in axilla subnormal. He complained that for the last 24 hours he had been very drowsy. Heart and lungs normal, urine was of a pale straw colour, and with the usual tests was found to contain large quantities of sugar. I prescribed, and advised the friends to keep him at home for a few days, and if no better, to remove him to the local hospital, informing them, at the same time, of the nature of the case, and giving a more hopeful prognosis than was eventually justified, as the patient died from Coma at 1 p.m. on the 21st June, about twelve hours after first being seen by me. This sudden termination was unexpected, and makes one regret that the patient had not come under notice sooner. Dr. Pavy, in his lecture on the clinical aspect of glycosuria, records several cases of sudden termination of diabetes one in a few days, and two cases of about a month's duration, dying at the respective ages of 46, 39 and 55 years, and I have notes of a few cases, taken when a student, of diabetes of older standing (two to eight years), suddenly springing into activity, and rapidly becoming fatal, all these cases occurring in the comparatively young.

BORAX IN CASES OF EPILEPSY.

By C. E. TODD, M.D. BRUX., L.R.C.P. LOND.
M.R.C.S. ENG., ADELAIDE, S.A.

I HAVE lately had such good results from the administration of borax in epilepsy that I think the fact deserves a record. The following cases have lately been under my care:—

Sister M. D., *æ*t. 44, a nun in a convent, near Adelaide, complains of "fits," which come on at any time or place, and during which she is insensible and often bites her tongue. She is rather anæmic, but otherwise well. During childhood she was subject to "fits," which were regarded as epileptic, but for the last 25 years she had not had an attack. For nine or ten months she has had a fit on an average once a fortnight, and has often fallen down while at work. I gave her a mixture containing the three bromides. This was continued for a month in increasing doses, but the fits became worse, and in one of them she fell down stairs and got a bad scalp wound. Her speech became so affected, and the fits so frequent, that I suspected she might have a cerebral tumour. Dr. Symons examined her eyes, and reported that the retinæ were normal. I then put her on ten grains of borax, with five drops of tinc. digitalis four times a day. That evening at mass she had a bad attack, but for five months afterwards was quite free.

The borax and digitalis were continued for three months, and then given up. Two months after stopping her medicine she had a fit, and the Mother Superior sent off for the mixture, but the bromides was sent by mistake. The attacks gradually increased in number and severity until I saw her again, when I found she had been taking my original prescription, instead of the one containing borax. The patient was at once put upon the borax and digitalis mixture, and since then—a period of three months—she has not had another attack; she is quite well, and teaches daily in school.

E. T., *æ*t. 28, mate on board a steamer complains of fits. His brother says that without any warning, the patient utters a cry, falls down, and is convulsed for some time. He has had fits now for six or seven months; during the last one he fell down the steamer's hold, and had still a fresh wound on his head when I saw him. He was otherwise in the most robust health. I ordered him twelve grains of borax three times a day. On the station platform on the way home he had a fit, and was taken to the private hospital, where for twenty-four hours he had a constant succession of the most violent convulsions I have ever seen,

and he was unconscious for thirty hours. As soon as possible he began taking the borax, and he was soon back at work, and has not had an attack since. He is now in the best of health.

W. H., *æ*t. 36, secretary to a public company. Is said to have had epilepsy when a boy. Has had six fits in the last twelve months, the last one the most severe, resulting in a scalp wound for which he consulted me. I kept him indoors under bromides for a few days. The first day he returned to the office he had a fit in the street, and was taken home in a cab. I gave him a mixture containing borax, and he soon went back to work, and has been quite well ever since—a period of twelve months. He takes his mixture for a fortnight occasionally, and is very careful in his diet.

Mrs. S., *æ*t. 30, has had occasional attacks supposed to be epileptic all her life, but of late her fits have been very frequent, and she often bites her tongue. Ordered borax gr. x. four times a day, and has been free from fits since.

H., *æ*t. 15, has had fits all his life; has on an average two or three a week. He is a confirmed epileptic. Under five grains of borax his fits lessened in frequency and violence. I increased the borax to ten grains, with the result that for many weeks he had no fit at all. Lately he has had them again, but his parents say that the attacks are not nearly so violent as they were formerly, and that his mental condition is improved.

I have had other cases under my care, but they all bear a very close resemblance to those quoted above. In every instance the patients referred to were free from heart or kidney disease, and but for their fits they would have been quite healthy. The nun was rather anæmic, but that may be accounted for by the fact that she spent very little time in the open air.

The improvement in each of my quoted cases after starting the borax may, of course, have been in the nature of a coincidence, inasmuch as the epileptic fits in four out of the five instances started in the midst of normal health. But I have other cases in which the result is equally good, and if it be a coincidence it is a very interesting one.

BRITISH PHARMACOPEIA, 1898.—The Australian Drug Company, Limited (O'Connell Street, Sydney), have pleasure in notifying to the medical profession that they are now manufacturing in their laboratories: *Tinctures, Concentrated Liquors, Infusions, etc.*, in accordance with the new pharmacopœia, and are prepared to supply same from this date. They standardise everything to the requirements of the 1898 issue, and will forward samples and prices on application.

A CASE OF RECURRENT SARCOMA OF THE SERRATUS MAGNUS.

By ALEX. MACCORMICK, M.D. EDIN., M.R.C.S. ENG., LECTURER IN SURGERY IN THE UNIVERSITY OF SYDNEY, HON. SURGEON PRINCE ALFRED HOSPITAL, SYDNEY.

S—L—, male, 56, admitted into C.I. Ward of Prince Alfred Hospital, March 29, 1887, complaining of a swelling of inner part of base of right axilla and scapula.

Previous History.—First noticed the tumour at the lower part of base of the right axilla three years ago, when it was shaped like a carrot, long and oval, and freely moveable. The growth was removed, and was said to have been about the size of a hen's egg. Patient soon afterwards noticed the tumour growing again. It grew up into the armpit, and towards the vertebral border of the scapula, to which it became firmly attached. He came to Sydney as it continued to grow steadily.

On examination.—He was a fairly healthy man, well-nourished, and of temperate habits.

A large flat tumour was to be felt on the right side, lying underneath, and attached to the vertebral border of the scapula. It extended forwards to the chest-wall, lifting the scapula from the trunk, and both scapula and swelling could be freely moved on the chest-wall.

Operation.—Vertical incision external to and parallel with vertebral border; transverse incision along spine of scapula as far as the acromio-clavicular articulation. The two triangular flaps of skin and superficial fascia were reflected, and the attachments of the deltoid and trapezius to the spine of the scapula were severed, and then the insertions of the rhomboidei and the levator anguli scapulae into the vertebral border were cut through, and the posterior scapular artery secured. Next, the muscles attached to the upper border were cut through, and the supra-scapular artery tied; the acromion process was cut across, and the tumour found to be fairly adherent to the vertebral border of the scapula, and to replace a part of the serratus magnus extending to the chest-wall, corresponding to the lower five or six digitations.

The latissimus dorsi was then shelled off the lower angle of the scapula, and the connections of the tumour to the chest-wall were severed close up to the ribs, but the whole of the serratus muscle was not removed, the incision passing backwards from the costal end of the third digitation to the scapula.

The scapula was tilted out, the attachments of teres muscles, subscapularis, and supra- and

infra-spinati were cut through, the joint capsule opened into, and the scapula disarticulated from the humerus; arteries were secured as met with. The cautery was now applied to the surfaces of the six ribs whence the digitations involved by the disease had been removed, and the wound stitched up.

Patient had an attack of traumatic delirium, commencing on the day after operation, and lasting a week; but the wound healed by first intention, and he left hospital on April 19th, 1887.

He was re-admitted January 22nd, 1889, with a recurrence in the axilla, which had evidently originated in the upper and inner part of the serratus magnus—i.e., that part which had been left behind in the first operation. This was now removed, and the wound healed by first intention. Left hospital February 19th, 1889.

On December 3rd, 1889, he was again admitted with a lump high up in the axilla, which he had noticed four months before. On this occasion it was attacked from the front. An anterior incision exposed the pectoralis major, which was divided, and the growth well seen. It corresponded to the positions of the first three digitations of the serratus, and was firmly attached to the chest-wall; vessels and nerves were carefully separated and put aside, part of the axillary vein removed, and the growth was removed as closely as possible to chest-wall, taking away the external intercostals from the first and second spaces. The surface of the ribs was then cauterized. The wound again healed by first intention, and patient left hospital December 17th, 1889. There has been no recurrence, and patient is now alive and well.

Remarks.—Primary sarcoma of muscle is one of the rarest of tumours. Mr. Butlin refers to nineteen recorded cases; but here in Sydney, where opportunities for research are probably less good than in London, only four instances are to be found. In any case, the condition is very rare, and an example is, therefore, somewhat interesting on that account alone.

This case is also instructive, in that it shows the necessity of removal of the whole of any organ affected by a malignant tumour. The tumour here started as a small growth in the serratus magnus, and at each operation removal was apparently wide of the disease; but the patient was never free from recurrence until the whole affected organ—i.e., the muscle—was removed. According to Mr. Butlin, sarcoma of muscle is exceedingly malignant, and he has not been able to find any instance completely cured by operation. These failures may, perhaps, be explained by impossibility of re-

moval of the whole affected muscle, for in the case now under notice the patient is to all intents and purposes free from the disease. Though the sarcoma was very malignant locally there has been no secondary deposit, and a freedom from recurrence for more than eight years may, I think, be fairly claimed as a successful result.

SARCOMA OF KIDNEY—NEPHRECTOMY—SUBSEQUENT INDURATION SIMULATING RECURRENCE—RECOVERY.

By DAVID HARDIE, M.D., BRISBANE.

MRS. M., 53 years of age, mother of ten children, with no special history, personal or family, beyond the fact that her mother died at the age of 42 from some uterine disease, which, she says, was not cancer. When she came under my notice in September, 1897, she was very thin and pale and gave the following brief history:—She first noticed a small swelling eighteen months previously in front of the right kidney. Soon after, the urine was observed to be bloody, and this has continued off and on ever since. She had suffered considerable uneasiness, though no acute pain, and had lost greatly in weight.

On examining the abdomen I found a tumour filling up the space between the ribs and pelvic brim and extending forwards to near the umbilicus. It was more or less moveable. Was it of hepatic, intestinal, renal or pelvic origin? Further examination showed that the pelvic organs were healthy, and that it had, apparently, no connection with the liver. These, therefore, were excluded. As to the others it was found that its main connections seemed to lie over the renal space. It felt not unlike a moveable kidney, only much larger and not nearly so moveable, and, furthermore, the urine contained blood. So far then it appeared clear that it was of renal origin. The history, the case, the appearance and age of the patient further suggested sarcoma. Dr. Bancroft kindly saw her with me and concurred in the diagnosis. We advised operation.

This was performed at a private hospital on 21st October, 1897, Dr. Bancroft assisting me, and Dr. Turner giving chloroform. The abdomen having been opened through an incision, $3\frac{1}{2}$ inches long, in the right semilunar line, the swelling was found to be the right kidney greatly enlarged. Subsequent examination showed that the kidney proper was reduced to a pulpy mass, and Dr. Turner, who kindly examined it microscopically, declared it

to be a sarcoma. There were no adhesions. After incising its peritoneal covering, the tumour was shelled out with the fingers. The capsule was so thin and friable, that, during this process, it burst, discharging some blood into the abdominal cavity. The pedicle was easily isolated, and, after tying the ureter and renal vessels separately, the tumour was removed. The cavity was well cleaned out, and, as there was very little oozing, I merely left in a gauze drain for 12 hours, and closed up the abdominal wound. We considered the question of making a separate opening in the loin for drainage, but thought it unnecessary. In this respect we made, I believe, a mistake, as subsequent events probably proved.

For a week she progressed very favourably, the highest temperature being 100.5° . The urine was blood-stained for 36 hours, afterwards quite clear, and amounted to from 22 to 33 ounces in 24 hours. The bowels moved on the fifth day. On the 28th, or eight days after the operation, the temperature rose to 102° , and next day to 103° , and she felt "bilious" and giddy. The wound was looked at, and appeared quite healed up. For the next few days the temperature varied from 100° to 102.5° , the pulse being generally about 100° . The stitches were finally removed on the 12th day, the wound healing by first intention. During the third week the temperature and pulse ran a lower course, but there was a feeling of resistance about the parts, and I was not satisfied. On the 20th day I was relieved to find a little pus discharging through one of the suture openings, and for some time it discharged freely. This was followed by considerable improvement, the temperature and pulse during the fourth week being very little above normal. This improvement continued during the fifth week, but the feeling of resistance now developed into one of hardness. Towards the end of the sixth week the temperature again rose, and, with the assistance of Dr. Turner, I made an incision over the most prominent part in the loin, expecting to find pus, but found none. The new swelling was nearly the size of the original tumour, and intensely hard in every direction. We looked on it as a recurrence of the sarcoma, and sent her home to die. My regret was equal only to my surprise, as I was perfectly satisfied the tumour was removed in its entirety. It could only be accounted for by the bursting of the capsule during removal.

She forthwith began, to my further surprise, to improve. The temperature soon fell to normal, her appetite improved, and the hard

swelling slowly diminished in size. This has gone on, until at the present time little of it remains. For the last two or three months she has gained steadily in weight, and has now left for a change in the country. The hard swelling was evidently an inflammatory induration. I am inclined to think it might have been prevented, had a counter opening for drainage been made in the lumbar region at the time of the operation.

LYMPHANGIOMA.

By L. E. BARNETT, F.R.C.S. ENG., DUNEDIN.
READ AT THE ANNUAL MEETING OF THE NEW
ZEALAND BRANCH OF THE BRITISH MEDICAL
ASSOCIATION.

DISEASES of the lymphatic vessels closely resemble diseases of veins and capillaries. Lymphangitis is comparable to phlebitis, and thrombosis occurs in the lymph vessels just as it does in the blood vessels. Lymphatics, too, occasionally become varicose, and show on the surface of the body as grey translucent tortuous lines or cords, especially where there is lymphatic obstruction. These varicose vessels may exude lymph, often in large amount, a condition known as lymphorrhoea.

Those common blood-vessel neoplasms known as naevi have also their counterpart in the lymphatic system. Superficial lymphatic naevi are not uncommonly seen as little grey spots or patches; these are comparable to the smaller birth marks, or capillary naevi. The larger masses corresponding to the venous, or subcutaneous naevi, are known as lymphangiomas, and are extremely rare.

A lymphangioma is a tumour, composed of a multitude of cysts, or loculi, of all sizes, due to the overgrowth and distension of lymphatic vessels and lymphatic spaces. The cavities which are continuous with the normal lymphatics in the neighbourhood, and contain ordinary lymph, are enclosed by walls of lymphoid and fibrous tissue, lined with the usual pavement endothelium of lymphatic spaces.

Lymphangioma, like naevus, is often congenital, or is noticed as many naevi are, not actually at birth, but a few days or weeks after. It occurs more frequently than elsewhere in the tongue and the lip, giving rise to those disfiguring conditions macroglossia, or big tongue, and macrocheilia, or big lip. In the face and neck, too, examples are occasionally seen; most of the blood cysts, and some of the hygromata and hydroceles of the neck are no doubt primarily lymphangiomas.

Very little information is given in any of the many books and journals I have consulted concerning this peculiar pathological condition. Professor Senn's work on tumours contains, I think, the best account.

Small lymphangiomas are said to frequently disappear spontaneously in early childhood. Larger masses are either stationary or progressive, and may occasion serious deformity, necessitating surgical intervention. Excision seems the most satisfactory remedy, but this is usually difficult, often inefficient, and always risky. The growth is never well-defined; the cystic spaces merge into normal lymphatics, and prolongations or loculi often pass deeply amongst important structures like the carotid vessels and vagus nerve. A further risk depends upon the fact that after any interference with these lymphatic masses there is a marked liability to erysipelas and cellulitis. The streptococcus of erysipelas loves lymphatics and luxuriates in thrombosed lymph, and in the region of the face it is almost impossible to keep it out where, as in lymphangioma, conditions are so favourable to its development. Amongst recorded cases of lymphangioma I have been struck by the large number in which erysipelas has occurred, and the case I am now about to describe has given me the gravest anxiety on account of most intractable erysipelas.

Needless to say many other methods of treatment have been tried. Electrolysis, cautery puncture, subcutaneous ligature, and, indeed, all the various procedures applicable to naevus, have been used for lymphangioma, but without very satisfactory results, and here, again, erysipelas has been a frequent and, at times, a fatal complication.

The case which I wish to briefly refer to as a good example of lymphangioma is that of a little boy, J. A., now about three years old, who was brought to me from the country by his mother on June 24th of last year, to see if I could recommend anything for a prominent and disfiguring swelling on the right side of the face. This swelling was noticed at birth, and the cause assigned by the mother was that she had had a tooth extracted when seven months pregnant with the child. Her medical attendant advised, very properly, that nothing should be done to the face for a year or two. Whilst cutting its teeth the child suffered every now and then from inflammation in the cheek, and on one occasion an abscess formed and burst into the mouth. The face would swell very much during these attacks, but in a few days would subside again, and on the whole, the swelling has not increased relatively to the rest

of the face since birth. In all other respects the child has been healthy. He is the fourth child of healthy parents, and all the other members of the family are healthy, and present no peculiarity. His birth, the mother states, was the easiest of all her family, and for none were forceps required.

The patient was a bright, intelligent, and lively little fellow, evidently in very good health and spirits, but almost repulsive in appearance owing to the disfigurement of his swollen face. The right cheek was bulged out as if by a huge gumboil, the right eye was partly buried in the swollen cheek, the nose was thickened and pressed over to the left, the naso-labial fold being obliterated on the right side, and exaggerated on the left. Both lips were swollen, especially in the right halves, the lower lip being fully half an inch thick. The mouth was half open and screwed to the left. The tongue was swollen and rough, and projected about a quarter of an inch in front of the teeth. There was an almost constant dribbling of watery fluid from the mouth. On everting the mucous membrane of the cheek I observed numbers of grey translucent warty projections, and running from them little tortuous grey lines. These were varicose lymphatics. They gave a roughened appearance and feel to the mucous membrane, and from them exuded the dribbling fluid. Below the jaw on the right side a firm nodular mass about the size of a walnut could be felt. This mass I took to be enlarged glands. It was a little tender to the touch, but the main swelling in the cheek was neither hard, tender, nor red. It had very much the consistence of the normal cheek.

I decided to excise part of the tumour and observe the effect of cicatricial contraction on the remainder. I accordingly sent the child into Dunedin Hospital, and on July 1, with careful antiseptic precautions, I dissected up from the submaxillary region a flap of skin, and removed as much as I could of the mass below the level of the mandible. This mass was composed in the main of a congeries of cysts containing straw-coloured lymph. The interstitial tissue was mostly a thin network, but in some places it was thick and fibrous. Some enlarged lymphatic glands and a portion of the submaxillary salivary gland were also removed. The facial artery and vein were divided and ligatured. With the object of exciting thrombosis in other parts of the mass a pair of fine sinus forceps were forced from the wound up into the tissues of the cheek in a dozen different places, the blades of the forceps

being dilated each time before withdrawal. The whole raw surface was then swabbed with zinc chloride solution (20 grains to the ounce), and the skin edges sutured together. The result of this trial operation was good. The patient recovered well and quickly, and in a month's time there seemed to be a slight but distinct improvement in the face.

On August 12, a more extensive operation was undertaken. The entire surface of the right cheek was thrown upwards as a flap on to the temporal region, and fully $\frac{1}{2}$ lb. of lymphangiomatous tissue was dissected away. The lips too were split in their long axis, and a small mass of cystic growth removed from each. After I had finished I half feared I had cut away too much, for the cheek now looked abnormally flat. For a fortnight the little patient's condition was satisfactory; then trouble commenced. Erysipelas attacked the face, the cheek swelled more than ever, the right eye closed completely, and the tongue, which I had not tampered with in any way, grew too large to be contained in the mouth, and protruded hideously like a sponge from between the swollen lips. The temperature ran high, varying from 100° to 105°, and did not come down to normal for three weeks. Then the red blush left the face, but much cellulitic thickening remained. After a few days of apparent convalescence a relapse of erysipelas of the same degree of severity occurred, and again and again did relapses occur. In fact, this relapsing erysipelas lasted altogether more than four months, and my poor little sufferer was reduced to a pitiable condition of emaciation, although fortunately for him, he was always able to take nourishment well. I used Ichthyol Paint (2½ per cent.) chiefly as a local application, but tried a dozen other remedies without avail. Internally I gave him tonics of various kinds, stimulants, and the most nourishing food. On nine different occasions I used anti-streptococcic serum (B. W. & Co.) in full adult doses, except for the first three injections, when small quantities only were used. With full doses the temperature fell for 24, and sometimes 48, hours about two degrees, and I fancy there was slight improvement in other respects, but the effect of the anti-streptococcic serum was not strikingly beneficial.

Once free of the erysipelatous attacks the patient rapidly regained strength and substance. Now he is once more a lively little urchin, full of fun, and a pet with all the students, but his face is not much better than when I first saw him, and rather worse, especially in respect to

the protrusion of the tongue, than before the second operation. He is improving still, however, slowly; the thrombosed thickening seems to be shrinking, the tongue is getting less prominent and the cheek flatter. He may, I hope, even yet be so much improved as to take his place without objection amongst other boys at school. I shall operate no more upon him. I am afraid, and I have brought the case under your notice, not as an example of successful surgery, but simply to illustrate the clinical features, the pathology, and the risks of operative treatment of lymphangioma.

NOTES ON A CASE OF CEREBRAL ABSCESS.

By J. MORISON GARDINER, M.B., CH.B.

READ BEFORE BALLARAT DISTRICT MEDICAL SOCIETY, APRIL 28, 1898.

J. R., *et* 30. admitted 14th March, 1898, temp. 97·2, working at weighbridge. Patient was an in-patient of this institution in 1895, and was treated for his lungs. Symptoms were: Cough dyspnoea, loss of appetite, lassitude, pains in legs, chills with perspirations, vomiting occasionally, some trouble with urination. On examination, at bases of his lungs, were moist sounds, etc.; no definite tubercular history. After remaining in about a month or more he was discharged as neurasthenic. Then again he was admitted in 1896, and with symptoms as of phthisis, with moist sounds at bases of lungs, dulness and bronchial breathing; signed up as phthisis after being in some months. This time he has been ill for about a week; has been thin and emaciated from his youth upwards, but lately had enjoyed fairly good health. Has been troubled greatly with headache, especially over the right side, about the temple and parietal prominence. Has internal strabismus slightly marked, also a small sub-conjunctival hæmorrhage of outer side of left eye. Has no facial paralysis at present, has had a cough for about three years, not troubled with it at night. Has not spat up blood in any large quantity. Does not have night sweats as a rule, but lately has been sweating rather freely, pain in head is only on the right side, none on the left; no blow or injury to head, patient is very slow in his speech and movements, no stammering. Has lost of power of left arm and leg, but not completely. Has lost use only this week, but gradually lost power of both legs last week—staggered and fell. No giddiness of any severity, has had vomiting yesterday and this morning,

sudden looseness of the bowels and bladder, sometimes difficult to pass, and at other times difficult to retain. Sleeps well as a rule, but not the last three or four nights. Has tingling and pins and needles sensation down right leg more than left leg, but has lost power of flexing and extending the toes and ankle of left leg, and also of bending the knee, can raise the left leg off the bed. Has no loss of sensation in either leg or arm. Has now complete use of right leg. Left arm is bent up rigidly, and fingers flexed. Sometimes he has twitches down both legs, especially the right one. No abdominal pains, felt sick once, has kept beef-tea down. Protrudes tongue towards left side, sordes on teeth, tongue red, dry, glazed. On examining heart apex felt slightly out and down, sounds clear in both mitral and aortic areas, but are faint. Breath sounds anteriorly faint, very small expansion, very small crepitations at right apex, no bronchial breathing, pulse weak 92 regular, T. 97·0°. Patellar reflexes both totally absent, no ankle clonus. Has no facial paralysis.

Family History.—Sister died of pneumonia, one brother of phthisis, another of pneumonia lately, mother died of heart failure, father of dyspepsia. All others living are healthy. Given Calomel. Mag. Sulph. and Iod. Pot. grs. x., t.d.s. Ice-bag to head did not relieve. Then fomenta applied. Coughed only once or twice thick yellow sputum.

15th March.—Vomiting a good deal, can't keep much down. Very dull looking, sweating profusely no shivers.

16th March.—Consultation held, conclusion, *tubercular meningitis*. Some râles at bases of lungs, also at right apex. Twitches over left side of face, and aggravated by touching or moving head. Left arm rigid.

17th March, 1898.—Died.

Autopsy, March 18.—Patient very emaciated indeed, as at end of a chronic phthisis case.

Lungs.—On both sides adhesions of pleuræ, very old and tough, all over both lungs, and especially at right apex. On making incisions in both lungs no tubercular nodules to be seen or felt. The lower lobes of each lung were tough and very firm like liver substance. Patches of broncho-pneumonia over bases of both lungs.

Heart very small, valves and endocardium healthy, badly nourished myocardium.

Liver and kidneys healthy in appearance.

Stomach.—Mucous membrane very much congested in patches.

Brain.—Skull-cap very thick indeed. Pus came away when removed; then noticed that a

very large, foul-smelling abscess, with thickened walls, had burst towards the inner surface of right parietal lobe, about the superior parietal convolution into the longitudinal fissure. Abscess was thus situated at posterior region of the parietal lobe, and close to its inner surface. About 3ii. of pus. There was no communication with the ventricles, which contained clear fluid. No sign of bone (mid ear trouble.)

A CASE OF PERINEPHRITIC AND SUBDIAPHRAGMATIC ABSCESS: OPERATION; RECOVERY.

BY S. J. RICHARDS, M.B., CH.M. SYD.,
MT. MORGAN (Q.).

THE serious nature of this condition, as disclosed by a communication in the *British Medical Journal* of March 12th, 1898. induces me to publish the following case. The writer of the article referred to quotes statistics which show that the recoveries without operation are 12 per cent.; and even after operation below 48 per cent.

I was first called to see E. W. N., 25 years, male, on the evening of April 10th, 1898. He was then suffering from pain in the right lumbar region, which began suddenly the previous day. He had had a very rough coach ride from Rockhampton a week before; and had spent much of the intervening time walking about and climbing the mountain, following his vocation of mining engineer. On the afternoon of the 10th, he, in common with others in the same house, had suffered severely from poisoning by Tyrotoxicon.

Previous history.—He had always been healthy until he had a severe attack of enteric fever about December, 1895. For nearly two years after this he enjoyed good health until November, 1897, when he had a severe attack of peritonitis in Rockhampton, lasting some weeks, which seems to have begun about the epigastrium, and been more severe towards the end of the illness in the right iliac region. He had two attacks of pain in the *right lumbar region* for half a day each shortly after the peritonitis, and after the temperature was normal. Again, in Sydney, three weeks afterwards, he had other slight attacks of pain in this last area. These last incidents were not thought much of at the time, and only recurred to him during convalescence from the operation below mentioned.

Present condition, 10th April.—No tenderness in loin. Urine normal. A mixture of

Citrate of Potash, Belladonna, Chlorodyne, and Buchu prescribed.

11th.—Condition not improved.

12th.—Slight tenderness in loin. Temperature rising slightly.

13th.—Temperature, 101.2° at 5 p.m. Tenderness more marked. Poultices ordered. Skin to be painted with Glycerine and Belladonna.

14th.—Pain easier; but side very tender. Temperature fell from 101.8° during last night to 99.2° this morning. Tongue very coated. No appetite. Bowels open daily. Evening, Temperature 101.4°.

15th.—Temperature, morning, 99.8°; evening, 100.2°. Less acutely tender, but tenderness more diffuse; extending anteriorly to below 11th rib.

16th, 17th, and 18th.—Condition about same, except that tenderness was extending slightly downwards and inwards. Temperature varying between 99.6° and 101°. Pain on inspiration; no friction to be heard. Urine deposited dense pink urates; but no pus, blood, or albumin.

19th and 20th.—Condition becoming more painful daily. Free sweatings. Dulness over liver area laterally of woody character. Temperature remaining between 100° and 101°. A slight fulness of flank and right hypo-chondrium noticed. Diagnosis of perinephric and sub-diaphragmatic abscess.

21st.—Operation, assisted by Drs Murray and Smith. CHCl_3 by Dr. Mackenzie. Exploratory needle inserted twice below last rib unsuccessfully; as also three times in lower intercostal spaces. The sixth insertion, in ninth space, withdrew a trace of thick, sanguineous pus. The abdominal parietes were then gently depressed below the last two ribs, and the needle inserted in the dull area below the 11th rib, and passed to the point reached at last insertion. A little pus again withdrawn. A 3½ in. incision made, grazing and parallel to the 11th rib, and cautiously deepened. From 12 to 15 ounces of very thick, sweet, sanguineous pus evacuated. Cavity found to extend high up beneath the diaphragm, over the liver and around the kidney. Counter opening made below 12th rib, as far back as possible. Cavity well flushed with Lysol lotion. Very large rubber drainage tube passed through. Three deep-stitches inserted, securing attachment of muscles. Usual dressings.

Temperature after operation, 100°; next day, 99°; thence normal right on. Recovery uninterrupted. Tube left out in about a week. Wound soundly healed 11th May.

Patient is now perfectly well and strong; has followed his professional duties for the last three or four weeks, and left Queensland to-day for Sumatra to take charge of a large mining property there.

CONGENITAL UMBILICAL HERNIA— OPERATION—ONE DAY OLD— RECOVERY.

By A. LEWIS LEVY, L.R.C.S. *et* L.R.C.P.
EDIN., NEWTOWN, N.S.W.

On the 27th March, 1898, I delivered Mrs. B., a multipara, of a female child, who had a congenital umbilical hernia, with a covering of peritoneum only, through which could be plainly seen the contents of the sac, namely, intestine. The cord was inserted into the hernial sac below its centre and to the left, and after delivery was tied in the usual place. I was able to reduce the hernia, and by manual pressure was able to keep it so. The umbilical ring was about the size in circumference of a florin, and I applied a pad of lint and cotton wool over the opening with a firm bandage, but this was not effective in keeping the hernia reduced. I called to see the child later on the same day, when the nurse told me there had been one motion of the bowels. On my visit next morning I found the tumour had increased in size, and that it was irreducible, and that there had been no movement of the bowels since the one mentioned above, and I also noticed that the intestine was turning a dark colour. There was no vomiting. I told the parents that the child would die, but that if operated upon it might recover, and, accordingly, they consented to the operation.

On the afternoon of the 28th, the infant, being one day old, was given chloroform, and having thoroughly cleansed the tumour and surrounding parts, using boracic lotion only, I ligatured the cord close up to its insertion with strong catgut, and cut it off short. I then again tried to reduce but was unable, so made a circular incision a quarter of an inch external to the umbilical ring, carrying the incision down to the peritoneum, but not opening it. I then dissected the sac from the umbilical ring, to which it was very closely adherent, and then opened the sac and reduced the hernia. I cut off the sac, and having cut away all the fibrous umbilical ring as far as the original incision, I closed the peritoneal cavity by interrupted catgut sutures, putting another row of sutures in the tissue between the peritoneum and

skin, and closed the wound by interrupted silk sutures. I applied several strips of Mead's plaster, which relieved the tension, which was considerable, and dressed with iodoform gauze, and cotton wool with a firm bandage. The child was much collapsed, but revived on the application of warmth, and although she suffered from considerable shock for three days, made an almost uninterrupted recovery, the wound having completely healed in three weeks, and the child is now in perfect health.



Photograph of child three weeks after operation

I have been induced to record this case, firstly, on account of its rarity—hernia into the cord being the more frequent malformation; secondly, on account of the early age of operation; and thirdly, recovery after such operation. I find that Rotch reports a case operated upon by Dr. Warren with recovery in an infant one day old, the hernia being into the cord. Notta has operated successfully on cases of umbilical hernia, but these were not congenital. Bryant reports a case of a male child one day old, hernia into the cord, the sac containing cæcum with appendix, upon which he operated with recovery.

In passing, I may add that on the 22nd April, 1898, I delivered a lady, by forceps, of a male child, who had a congenital umbilical hernia into the cord, and in addition spina-bifida, double club foot, and hydrocephalus.

A CASE OF ROUND-CELLED SARCOMA GROWING ON THE SITE OF AN ABSCESS.

BY ARTHUR H. CLARKE, M.R.C.S. ENG., ETC.,
HOBART, TAS.

ON January 27, 1898, I was called to see W— T—, messenger, aged 44. He had been treated previously for dyspepsia and pains in the abdomen. On questioning him he gave the following history:—He had suffered from pains in the abdomen and nausea for some days, but not sufficiently to confine him to bed. On January 26, when walking quietly along, he was seized with an acute pain in his abdomen, which he described as a stitch; it was severe enough to double him up, and was most intense a few inches above the umbilicus in the middle line. He sat up against a fence for the greater part of the day, but managed to crawl home in the evening.

On examination no swelling could be felt, the abdomen was rigid and very tender over an area about twice the size of the palm of the hand, some six inches above the navel, and in the middle line. Considerable pain was felt if the patient attempted to rise himself from a lying to a sitting posture.

The patient was kept recumbent, an application of glycerine and belladonna made to the part, and an opiate given.

Two days afterwards, when the patient was straining at stool, he felt something give way in the front of his abdomen, and this was followed by a return of the acute pain which he had before suffered.

I visited him next morning, and found a swelling the size of a walnut in the rectus muscle in the region where the pain was previously felt. This was obviously in the substance of the muscle, as it moved with the muscular contraction. There was also some bruising over and around the tumour. I thought at the time that a few fibres of the rectus had ruptured, and that the swelling was caused by a small hæmatoma.

With rest the pain subsided, but the swelling remained the same. A few days later when the patient was lying on a couch, in attempting to open a window with a broken cord, he felt the same tearing sensation, followed by stitch. When I saw him I found that the swelling had increased considerably, being as large as a mandarin orange, and very tender; it was of a firm elastic consistence. He was again put to bed, but the swelling continued to increase, and I decided to insert an exploring trocar, and see whether it contained any fluid.

Accordingly, on February 14, I went down with this purpose, but found that there was an abscess obviously pointing just to the left of the linea alba.

Chloroform was given by my partner, Dr. Giblin, and on making an incision I found a small abscess cavity about the size of a hen's egg, containing curdy pus; it seemed to be in pockets, and was surrounded by a good deal of inflammatory exudation. It appeared to be situated behind the sheath of the rectus, but the muscle was infiltrated as well.

I put in a drainage tube and dressed the wound with sublimate gauze.

For some weeks after this the wound continued to discharge. It would stop discharging for a time and apparently be on the point of healing, and then, suddenly, the swelling would increase in size, become painful and discharge a quantity of pus, and then again decrease.

Towards the middle of April, some three months after the beginning of the disease, the swelling began to increase rapidly in size, and the discharge ceased.

On April 22nd I saw the patient in consultation with Dr. Scott; the swelling was then as large as a cocoanut, there was a distinct area of resonance between it and the liver, and it did not appear to be in connection with any other organ. It appeared to be of a firmer consistency than previously.

On hearing the history and making an examination Dr. Scott agreed that it appeared to be an abscess unconnected with any surrounding viscus, and advised a free incision.

Accordingly, two days afterwards, the patient was again anesthetized by Dr. Giblin, and I made an incision into the swelling. I found a very different state of affairs from that which prevailed at the time of the first incision. There was no definite abscess cavity, and I could find but little pus, but cut through a large quantity of friable tissue which appeared to extend back to the intestines. I inserted a large drainage tube and dressed the wound as before. I took the opportunity of removing a fragment of this growth, and sent it to Dr. Sprott, who kindly cut some sections for me; we found it to be a typical round-celled sarcoma.

After examining these sections I informed the relations of the patient of the hopelessness of the case, and that no operation would be of any avail. They suggested that I should call in another medical man for a further opinion on the case.

Accordingly, on May 6, I met Dr. Wolfhagen in consultation. He had previously seen the microscopical sections of the tumour, and

confirmed my diagnosis, and agreed that no further operative treatment would be justifiable.

I continued to see the patient daily till May 8th, when he passed out of my hands. At this time the tumour had increased to the size of a child's head, there was a considerable amount of watery discharge of an unpleasant odour, and the growth had begun to fungate at the edges of the incision.

I heard afterwards from the relatives of the patient that he had fallen into the hands of a homœopath, who went down with the intention of removing the tumour, and made a large incision through it, but finding it too extensive for removal (it was the size of a child's head, and the muscle was infiltrated probably far beyond the edge of the tumour), stitched it up again, and treated him with intramuscular injections of some blue material (probably Methylene blue) in the lumbar region. The stitches gave way, leaving a large opening into the abdomen. He became too weak for more injections, and died on May 30, some three weeks after I had left him, and four months after the beginning of the disease.

A CASE OF ABSCESS OF THE CEREBELLUM, FOLLOWING DISEASE OF THE EAR.

By T. S. KIRKLAND, M.D., F.R.C.S.E., ASSISTANT SURGEON THROAT AND EAR DEPARTMENT, SYDNEY HOSPITAL, SYDNEY.

MY reason for showing you the patient in this case of recovery from abscess of cerebellum after operation is that there are still certain objective ocular signs present, which, although not marked, yet warrant me in raising the question of their significance, and also to show you that the trephine holes have been apparently filled up with new bone.

The patient C.B., aged 16 years, had suffered from chronic otorrhœa for two or three years. On the 6th September, 1897, when I first saw him, he had been ill for five days, suffering from intense pain in the left ear, with a temperature of 103°, coincident with cessation of the discharge from the ear. Inspection showed an inflamed drum, with signs of pus in the middle ear. I promptly incised the drum, and gave exit to pus with a strongly disagreeable odour. The pain was somewhat assuaged, but the temperature continued the same, in spite of careful antiseptic cleansing of the ear. On the following day the pain increased in severity, accompanied by a rapid pulse and furred tongue. I had then some fear that the inflammation had

leapt the bounds of the tympanic cavity, although there were no signs indicating mastoid involvement beyond slight tenderness. On the third day of my having seen him the mastoid was swollen, and presented the typical concomitant symptom of forward and downward projection of the external ear. With the assistance of Dr. Jamieson, I opened the mastoid cells, which contained a few drops of pus, and remembering Gruber's advice in these cases, I thought it advisable to postpone further operative work, and watch the result. The following day brought no improvement. He now complained of severe pain in the occiput, and said his head was coming off. Examination of the eye showed early signs of optic neuritis, viz., blurring of the edges of the disc, slight enlargement of the veins, with prominence of the capillary circulation. These signs were more obvious by comparing the two fundi, as the right showed no departure from the normal. This sign appears to have an increased significance in pointing to the side on which we are most likely to find the source of trouble. Vomiting, giddiness, drowsiness, normal temperature and pulse taken with the above signs pointed emphatically to cerebral extension. Dr. Brady saw the case with me, and concurred in the diagnosis of cerebral or cerebellar abscess, to the latter of which I had a strong leaning. With his kind and able assistance I opened the mastoid antrum, which contained cholesteatomatous masses. These were removed, and the cavity carefully cleansed. The skull was trephined one inch above the supra meatal wall; the dura mater bulged out with visible pulsation. A trocar was inserted, but no pus discovered; but on passing it into the lateral ventricle about 3ii. of cerebrospinal fluid escaped. The trocar was then passed in the direction of the cerebellum through the tentorium, in the hope of tapping any pus present in that region, but without result. From the pulpy and soft condition of the brain Dr. Jamieson expressed the opinion that the patient had acute encephalitis. The wounds were dressed, and the patient put to bed. The outlook was grave, and, as Dr. Jamieson succinctly remarked, he had better hand in his checks. I still had the feeling that pus was present, so on the following day, after consultation with Dr. Brady, I recommended his parents to allow a further exploration. The operation had given relief to the pain in the head, although his general condition was worse. He showed signs of sinking. Dr. Brady trephined over the cerebellum $1\frac{1}{2}$ inches behind the ear and $\frac{1}{2}$ inch below Reid's base line. The

brain presented almost the same appearance. We were here rewarded by finding about $3\frac{1}{2}$ of foul-smelling pus. A drainage tube was inserted, together with small pieces of the trephined bone. The discharge continued with the same odour for three weeks, and towards the end a small hernia cerebelli showed itself, which shrivelled up on the application of an astringent powder. It is only recently that the ear discharge stopped, and even now the external ear smells as if an inappreciable amount of pus were still being secreted. I need hardly say that his bad symptoms disappeared, and that his mother thinks he displays more intelligence now than heretofore. The case is of interest from a diagnostic point of view. Thrombosis of the lateral sinus was excluded by the absence of shivering and signs of infarction in other parts of the body, but it was more difficult to dismiss from consideration pachy- and leptomeningitis. We are told, however, by high authorities that abscess in the cerebellum is the result of extension along the lateral sinus, which, if affected in this case, must have been externally. There were no localising symptoms present at any time, so that subjective symptoms formed the basis for the localisation of the abscess. Occipital pain, persistent vomiting, and retracted abdomen, were the symptoms upon which I relied, together with transient retraction of the head. The optic neuritis remained for some months after, and at the present time I do not think it has wholly disappeared. In connection with this symptom Jacobson states that the non-disappearance of this sign indicates incomplete recovery and the presence of pus in the brain. The supervention of this symptom on the 8th day of illness and the second day of cerebral mischief is not in accordance with Gowers, who states that it generally appears about 14 days after the attack. It is interesting to note that the first trephine hole has been filled up with new bone, and that the pieces of bone inserted over the cerebellar opening have grown in spite of a foul discharge trickling over them for some weeks. Henry Dean, in Treves' Surgery, says, "Although the pus is fairly obvious in the brain, it is impossible to say whether it is in the temporo-sphenoidal lobe or the cerebellum." The difficulty of localisation is accentuated by the mentioning of a case which Dr. Brady operated upon last week, in which at the *post mortem* the abscess was found in the frontal lobe on the opposite side of the brain to the ear diseased. The operation which Dean mentions seems to overcome the difficulty of localisation by making it possible to reach both regions with one opening.

He makes an opening $1\frac{1}{2}$ inches behind and $\frac{1}{2}$ inch above the centre of the external meatus. By this procedure a part of the lateral sinus and the dura mater just above it are exposed. After slightly enlarging the hole upwards with a pair of cutting gouge forceps the dura mater can be incised, and an exploration of the temporo-sphenoidal lobe satisfactorily carried out. If the pus be not found, the opening can be enlarged to a slight extent downwards and backwards, exposing the whole diameter of the lateral sinus and the dura mater for a short distance below it. By incising the dura mater the cerebellum can be exposed within a few minutes of exploring the temporo-sphenoidal lobe. During the last few years advance in brain surgery has been almost contemporaneous with the advance in localisation, and the success following bold operative intervention is almost equal to that reached in other parts of the body more accessible and less concealed. There is no doubt that more accurate localisation will yet be the means of securing a higher percentage of recoveries in cerebral abscess. Not many years ago eminent neurologists discouraged exploratory operations upon the cranium, regarding them as hopeless, but at the present time it becomes the imperative duty of every physician or surgeon to give these cases a chance of escape from certain death. Out of seventy-five cases collected by Barr fifty-five occurred in the temporo-sphenoidal lobe, thirteen in cerebellum, four in cerebrum and cerebellum, two in pons varolii, and one case in crus. In all the abscess was on the same side as the ear disease.

FOUR CASES OF OCULAR TUMOURS.

By L. S. MANNING, M.B. ET CH.M. ABERD.,
CHRISTCHURCH, N.Z.

CASE 1.—SARCOMA OF EYEBALL.

MISS R., *æt.* 26, sent for me at 8 a.m. on 26th January last on account of intense pain in right eye, from which she had suffered all night. She had had great pain on the two preceding nights, but it subsided somewhat during the daytime; her health otherwise was very good indeed. I was told that the eye had gone suddenly blind in July last, and being then in Australia she had consulted an ophthalmic surgeon in the city where she then was. She remained under his observation until October, and on her departure from the town he gave her a card on which he had penned some notes of her case. From these I gathered that there was complete de-

tachment of the inner half of the R. retina, R. vision=fingers at 2 yards; VL= $\frac{1}{2}$; Tension of R.—? Operation was not advised.

The treatment adopted was complete rest in bed for three or four weeks and pilocarpine injections, which failed to have any effect on the detachment.

Examination of the eye was made with some difficulty, as it was very tender, and she dreaded having it touched. The lids were moderately puffy, no discharge between them, but lachrymation was considerable; T+2 or 3; no proptosis; conjunctiva congested and considerably chemosed; cornea normal; anterior chamber quite obliterated; aqueous humour clear; iris light blue-grey in colour, perhaps slightly less bright than that of left eye; pupil semi-dilated, fairly round, and quite motionless; no synechiæ or exudation in pupillary area; with focal illum. lens n., behind it is seen a dull yellowish mass, not yellow enough for pus, and unlike a simple detachment of the retina in its colour, and devoid of blood-vessels on the surface of the mass; with the ophthalmoscope nothing whatever could be seen, there being no fundal reflex.

The patient had never noticed anything wrong with the eye until July last, when it went suddenly blind. She lost no time in seeking medical advice. She could ascribe no cause, but the surgeon seemed to attach a good deal of importance to her habit of stooping whilst packing her boxes.

Up till six weeks before coming under my notice she had suffered no pain nor discomfort, or inconvenience of any kind, excepting that occasioned by the loss of the sight of one eye. She then began to have a feeling as though the "back of the eye was being scraped," and this sensation continued off and on until it merged into actual pain. She was then forced to seek relief.

From the first I was strongly of the opinion that this was a case of ocular tumour. It must either be that or acute glaucoma; and against this latter was the peculiar mass seen behind the lens and the history of a detachment. An iridectomy was proposed, with the idea that it would relieve the pain and enable me to watch its progress for a few days, and if it turned out to be an actual case of glaucoma such an operation should be curative. It was therefore done under chloroform the same day. The pain now left the eye, but returned in a day or so in the right temple. In four days' time—the pain in temple continuing, and the tension being still as high as before the iridectomy, enucleation was decided upon, and done on the 30th January.

On incising the eye, vitreous contained a few clear yellowish semi-gelatinous masses and a dark nodule, probably an old blood clot; and at the posterior pole, near the macula, was a dark mass about the size of half a split pea.

The optic nerve was cut off fully $\frac{1}{2}$ in. behind the ball, and seemed to be healthy, as was also the exterior of eyeball; no secondary growth felt in orbit.

The socket healed completely in a week or so, and the patient left Christchurch in good health a few days afterwards.

Dr. Fox kindly prepared the lymphoid semi-gelatinous masses and a piece of the tumour for microscopic examination, but they are unstained. The tumour was chiefly composed of a mass of round cells, closely packed together; several spindle cells and a few pear-shaped are seen. A few of each kind of cell have long thread-like tails attached. There are no fibres. Some brownish-red dots are seen in and between the cells. I think these are probably blood pigment. There is no melanin to be seen.

Diagnosis.—Round and spindle celled sarcoma.

CASE 2.—MELANOTIC SARCOMA OF EYEBALL.

M. W., *et.* 47, charwoman, came to me on 9th December, 1890, complaining that she could not read with right eye during last five weeks. About the same time it began to ache and run with water, and a "shade" appeared before it.

The right eye now aches constantly, and there is a burning sensation in both eyes, and every now and again darts of bright lights appear before right eye.

No previous history of eye trouble, no injury. She is in the habit of straining herself by lifting water tubs. General health very fair, but not robust. Is very nervous about sight of her eye.

Examination of Right Eye.—Conjunctiva sclera, cornea, iris normal. Pupils act to light and accommodation well.

R. Oph. Exam.—No opacities in media O.D. and fundus seem normal.

V.R. = $\frac{1}{12}$ (2 l) + 1.50D cyl. ax. 70° = $\frac{1}{12}$ reads JIc + 1D in addition.

L. = $\frac{1}{12}$ (2 l) + 2.50D cyl. ax. 70° = $\frac{1}{12}$.

These glasses were ordered for constant use.

25th March, 1891.—Patient says the "shade" before right eye is increasing, and darting lights still frighten her.

V.R. = $\frac{1}{12}$ + 1.50D cyl. ax. 70° = $\frac{1}{12}$.
I. o glass = $\frac{1}{12}$ (2 l).

R. Exam. Oph.—Red fundal reflex normal in centre, but the lower and outer part is a dull grey. On examining the fundus more closely there appears to be a decided *advancement* of

for emergencies, the end may be attained by putting them into a stoppered bottle with about 3i. of ac. carbolic solution 1 in 20, this keeps them moist without weakening them at least for some months, I have not tried them for a longer period.

Tendons which have not been collected by the surgeon himself, or by some reliable person, should be avoided. Bushmens' tendons are drawn out with dirty fingers or teeth and hung over a rail to dry, before this process is complete a certain amount of decomposition takes place, and they become infiltrated with various irritant toxins, which, of course, are not affected by the ordinary means of sterilization. The consequence of their use is a stitch abscess, a sterile abscess perhaps, but often still troublesome enough.

During the time that I have used tendons prepared according to the method just described, I have never had a single stitch abscess, even in cases where the wound itself has suppurated, not a drop of pus has ever exuded from the stitch holes, showing, I think, that they are not only aseptic but antiseptic. The greatest objection I know to their use is the rapidity with which they are absorbed in sound tissue, the knot and unburied portion may generally be picked off on the sixth or seventh day, when used as skin sutures. Absorption is not quite so rapid when the suture is quite buried, but is still too rapid for such operations as that for strangulated hernia, or secondary restoration of the perineum.

To meet this difficulty the tendons may be chromacised by several methods. The following, communicated to me by Professor Watson, and which he calls the rapid method, appears to meet all requirements:—The tendons are first sterilized in 1 in 1000 hyd. perchlor., and either dried or placed in methylated spirit, they are then defatted by washing in ether for as long as one hour if the tendons are large.

They are then shaken up in a one per cent. solution of chromic acid for twenty minutes (they should be kept in motion all the time, otherwise the points where the tendons cross one another will not be properly chromacised), then take out the tendons and churn them (in a closed jar) in a one in four mixture of sulphurous acid until the opaque yellow colour is replaced by a translucent green; wash in methylated spirit, and preserve for use in a two per cent. solution of salicylic acid in methylated spirit. This process will produce a tendon which will last for thirty days; if they are required to last for longer than that they must be kept for a longer period in the chromic acid solution.

For primary perineorrhaphy there is nothing to equal tendons, in the last nine cases of which I have notes, all have healed by first intention, and the sutures have been washed off by the nurse on the fifth or sixth day, thus saving the patient a further exposure.

For wounds of the face and other exposed parts where it is desirable that there should be as little scar as possible, tendons are much the best sutures, the stitch scars are smaller and disappear more quickly than those left by any other material with which I am acquainted. A wound in healthy tissue sutured with tendons may simply be left alone under a collodion dressing until the latter comes off by itself, bringing with it the knots and unburied portions of the tendons. Another great advantage is that the stitches rarely require removal, an advantage which will be best appreciated by those who know from personal experience how painful the removal of a stitch may be.

CASE SHEWING THE EFFECT OF CEREBRAL COMPRESSION ON THE PULSE.

BY NORMAN W. KATER, M.B., CH.M. SYD.,
RESIDENT SURGEON PRINCE ALFRED HOSPITAL, SYDNEY.

J. K., MALE, *æt.* 16, was admitted to Prince Alfred Hospital on May 12th, with a history of having had his head crushed by machinery about half-an-hour previous to admission. Patient was in a semi-conscious condition, answering his name when asked. He was considerably collapsed, the pulse being weak, and irregular both in rhythm and force; its rate being about 30 beats per minute. On examining the head there was seen to be a large piece of depressed bone in the left parietal region. The case was admitted under Dr. MacCormick, who was in the building, and taken at once to the theatre. The head was shaved, and chloroform administered, a semilunar flap raised from the skull over the depression, and the depressed bone removed.

Fifteen seconds after the depression was raised the pulse was beating at the rate of 40 per minute. Within one minute its rate had risen to 56, within two minutes it was beating at 60. Fifteen minutes after the operation the rate was 68. The patient recovered consciousness the day after the operation, but has been in a very drowsy condition ever since. The wound healed well. There is no sign of any paralysis. Patient is quite rational, and answers questions when spoken to.

PROCEEDINGS OF BRANCHES.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE Nineteenth Annual Meeting was held on June 30th, 1898. Present: The President (Dr. Giles), Drs. Swift, London, T. K. Hamilton, Harrold, Symons, Poulton, Cleland, H. H. Wigg, J. C. Verco, G. C. Hayward, Cavenagh-Mainwaring, Henderson, Gregerson, A. F. Smith, Bickle, C. W. Hamilton, Fischer, Hone, H. M. Evans, Russell, A. J. Campbell, Morgan, Marten, Borthwick, Michie, Corbin, Clindening, A. A. Hamilton, J. A. G. Hamilton, Sweetapple, J. H. Evans, Prof. Watson, and the hon. sec. (Dr. W. T. Hayward).

Minutes of the last Annual Meeting read and confirmed.

On the motion of Dr. CLELAND, seconded by Dr. POULTON, the Annual Report was taken, read, and adopted.

On the proposition of Dr. HAYWARD, seconded by Dr. POULTON, the Treasurer's statement was adopted.

ELECTION OF OFFICERS.

The following members were declared elected, there being no opposition:—President, H. Swift, M.D., Cantab.; Vice-President, R. Humphrey Marten, M.B., Cantab.; Treasurer, T. W. Corbin; Secretary, W. T. Hayward. Ordinary Members of Council, Drs. J. B. Gunson, J. A. G. Hamilton, and J. H. Henderson.

On the motion of Dr. H. H. WIGG, seconded by Dr. LONDON, the Parliamentary Bills Committee was re-elected, and Dr. Borthwick's name was added to it.

The Hon. Secretary was re-elected local editor to the *Australasian Medical Gazette*, on the motion of Dr. SYMONS, seconded by Dr. VERCO.

The PRESIDENT delivered his retiring address, and afterwards introduced Dr. Swift, the newly elected President.

Dr. SWIFT, upon taking the chair, said: Gentlemen, I thank you most sincerely for the very kind and cordial manner in which you have received my induction into this chair. I thank you most earnestly for the very great honour you have done me in electing me to preside over the Branch. The office of President of the South Australian Branch of the British Medical Association is, I take it, the greatest prize that the medical profession of South Australia has in its power to confer on any of its members; and so, when I recall the names of the many illustrious and distinguished members who have occupied this chair, names of men whose reputation has spread throughout the colony, throughout the sister colonies, throughout the mother country, aye, over the whole of the world, when I remember the trials and tribulations of some of these past Presidents, and when I recollect the grave responsibilities that are attached to this office, you will not be surprised when I say that I am deeply impressed with my own unworthiness, and feel very much over-weighted. But when I look around upon the individual members of the new Council, whom you have just elected, I regain some amount of confidence, and am buoyed up with the hope that with their kindly assistance and experienced aid we shall weather all storms and dangers that may arise, and that, when my year of office is over, the fortunes of the Branch will not have diminished, and that its star will still be in the ascendant. Gentlemen, I thank you.

The PRESIDENT moved, and Dr. T. K. HAMILTON seconded, a vote of thanks to the retiring President for his able address and conduct in the chair during the past year. Carried.

Dr. POULTON moved, and Dr. J. A. G. HAMILTON seconded, a vote of thanks to the retiring officers. Carried.

Dr. CAVENAGH-MAINWARING proposed, and Dr. HONE seconded, a vote of thanks to the Council of the Adelaide University for the use of the room in which the Branch had met. Carried.

Dr. LONDON showed a case of a large ventral hernia in a child, also a child suffering from burns due to the Röntgen Rays.

Dr. SWIFT brought up again the child he had exhibited on a former occasion, suffering from eczema of the nails, whom he had been treating with thyroid tabloids. She was now almost well, the nails being almost normal. He also exhibited a boy upon whom he had performed tracheotomy for laryngeal diphtheria. This was the third consecutive successful case of the kind he had had, and he attributed the result to the combination of anti-toxin injection and tracheotomy.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MINUTES OF MEETING OF COUNCIL HELD IN WELLINGTON ON JUNE 4, 1898.

CREDENTIALS OF DELEGATES.

PRESENT: Dr. Fell (President and representative for Auckland), Dr. Martin (Wellington), Dr. Perkins (Wellington), Dr. Mason (Parliamentary Secretary and representative for Canterbury), Dr. Fyffe (deputy delegate for Dunedin), and Dr. G. Campbell (general secretary and representative for Canterbury). Napier and Nelson were not represented.

The minutes of the previous meeting were read and confirmed.

CORRESPONDENCE.

Certificate of Death.—A letter was received from Dr. Cordner (Rakaia) suggesting that action be taken to have the ordinary death certificate so altered as to enable the insertion of the words "as I am informed" after the words "that—he died" in the third line.

Dr. CAMPBELL said that, as was pointed out, a patient might die some time after the visiting doctor had attended him, and the medical attendant had to rely upon the information of the deceased's friends. The Canterbury Section favoured the alteration, but wished the words "and believe" also to be added.

Dr. MARTIN said the words "as I am informed" were used in the London certificate.

Resolved—That the present death certificate be amended by adding the words "as I am informed."

An amendment by Dr. Campbell to add also the words "and believe" was lost.

The Parliamentary Secretary was instructed to bring the matter under the notice of the proper authorities.

Locum Tenens.—A letter was read from Dr. Hayes, asking whether it would be possible for the Secretaries of Sections to keep a list of gentlemen desiring to act as *locum tenens*, or desiring to exchange districts for the purpose of a holiday, etc., for short periods.

It was pointed out that trouble might arise in reference to the qualifications of some of those gentlemen who might be placed on the list.

Resolved—That the Council cannot take upon itself to make any recommendation, but leaves the matter to the various Sections to take what action they think proper in this direction.

Date of Annual Meeting.—An unofficial letter was read from Dr. Walker, suggesting that the second week

in January would be the best time for holding the next annual meeting in Auckland.

It was pointed out that as that was the holiday season in Auckland there would be a representation from the South.

Resolved—That the date of the Auckland meeting be left to the local Section to fix.

British Medical Association Meeting.—A letter was read from Sir T. Grainger Stewart, inviting the Branch to send representatives to the annual meeting in Edinburgh.

Dr. CAMPBELL (General Secretary) stated that he had already replied to the effect that the Branch, while thanking Sir Grainger Stewart for his cordial invitation, could not see its way to send delegates on this occasion, because the invitation was not received in time.

Clerical Assistance.—A letter was received from Mr. E. J. Le Grove, setting forth the terms for services rendered at Council Meeting.

Dr. CAMPBELL reported that he had arranged for such services, as the Council had left the matter to him.

The action of the General Secretary was endorsed.

Imbeciles, etc.—A letter was read from Mr. Mackenzie (Auckland) in reference to the classification and education of imbeciles, and decrying the proposition of the Government to take these people from the asylums and house them in the old gaol in Wellington.

Resolved—That as the paper read by Dr. Collins before the annual meeting included the subject, and had been laid before the Government, the Council cannot see its way to take further action in the matter at present.

HONORARY MEMBERS.

Letters were received from Dr. MacGregor, Sir James Hector, M.D., and Mr. J. A. Gilruth (Government Bacteriologist), thanking the Council for their election as honorary members.

ACCOUNTS.

Accounts amounting to £5 18s. were passed for payment.

APPLICATIONS FOR MEMBERSHIP.

The following gentlemen were elected members of the Branch:—

Alexander, W. C.	Wellington	Leatham, H.	New Plymouth
Andrews, P. O.	Nelson	McIntyre, J. H. L.	Palmerston N.
Bayntun, F. T.	Auckland	Palmer, A. B. A.	Featherston
Bond, J. H.	Thames	Rawson, Ernest	Wellington
Bronte, A.	Levin	Skerman, S.	Marton
Chappell, W. A.	Wellington	Stenhouse, A.	St. Bathans
Coates, F. W.	Auckland	Thomas, J.	Pleasant Pt.
Faulkner, A. B.	Seacliff	Trinnell, T. J.	Mongonui
Innes, J. B.	Wanganui	Young, J.	Invercargill
Johnson, D. B.	Casterton		

AMENDMENT OF BY-LAWS.

The following amendments in the by-laws were agreed to:—

By-law 5 to read: "The Branch shall have the following officers:—(1) President, (2) President Elect, (3) Chairman of the Council, (4) General Secretary, (5) Parliamentary Secretary, (6) Editor.

By-law 6: The words "shall have a deliberative and casting vote" were struck out, and the words "shall be entitled to a vote" inserted in lieu thereof.

By-law 7a was added to the list as follows:—"The Chairman of the Council shall be elected at the annual meeting. He shall preside at all meetings of the Council. If absent from any meeting, the members of the Council present, if a quorum, shall elect a substitute. He shall have a deliberative and a casting vote."

By-law 9: The word "President" was struck out, and the words "Chairman of the Council" inserted in lieu thereof.

By-law 10: The first two sentences were struck out. The following were added to stand as by-law 10a—"The Parliamentary Secretary shall be elected at the annual meeting. He shall watch the interests of the medical profession in matters relating to legislation, and shall be the medium through which communications are made to the Government. He shall not be entitled to a vote except as a delegate or deputy delegate."

By-law 11: The words "or deputy delegate" were inserted after the word "delegate" in the third line.

By-law 12: The following words were added—"A section entitled to more than one delegate, being only represented at a meeting of the Council by one delegate or deputy delegate, such representative shall exercise the full number of votes to which his section is entitled."

By-law 13: The words "to the Council" at the end of line 3 were struck out.

By-law 13a: The following new by-law was adopted—"The annual subscription shall be one guinea (£1 la.) in addition to any further amount not exceeding ten shillings and sixpence (10s. 6d.) the Council may from time to time consider necessary for the expenses of the Branch. The sections are authorised to levy a further subscription for current expenses from the members residing in the towns in which the monthly meetings are held."

By-law 14: This was altered to read as follows—"The Council shall meet as may be necessary in Wellington. It may also be called together during the session of the annual meeting in whatsoever centre it may be held."

A proposal to add the words "or Christchurch" after the word "Wellington," moved by Dr. Campbell, was negatived.

By-law 16: The word "the" was substituted for "its" in the second line, and the words "to the Council" in the fifth line were struck out.

By-law 22: The words "to the Council" in the second line were struck out.

By-law 25: The word "President" was struck out, and the words "Chairman of the Council" inserted in lieu thereof.

By-law 28: This was amended to read as follows—"The section in whose district the annual meeting is held shall appoint an officer who shall be responsible for the arrangements in connection with the annual meeting, and shall duly inform the several sections of the appointment. All business to be brought before the annual meeting must be notified to him at least one month before the date of the meeting."

By-law 29: The following words were inserted between the words "shall" and "issue" in the first line—"jointly with the general secretary."

By-law 32: The words "of the Branch" were inserted after the word "meetings" in the first line.

By-law 36: The word "may" was substituted for the word "shall" in the second line.

By-law 37: The words "to the Council" at the commencement of line 3 were struck out.

By-laws 13, 16, 22, 37, 40, and 46: The word "General" was inserted before the word "Secretary" in each of these by-laws.

COLLECTION OF SUBSCRIPTIONS.

Resolved—That the collection of the Branch subscriptions be left in the hands of the General Secretary, he being responsible to the London and Sydney offices for subscriptions to the *Journal* and *Gazette*, and that the secretaries of Sections be responsible only for levies needed for their own district.

EXPENSES OF LAST ANNUAL MEETING.

Dr. FYFFE reported that the expenses of the annual meeting, 1898, amounted to £20 13s. 6d., showing a debit of £10 3s. 6d. against the Sections.

Resolved—That Dr. Fyffe send a copy of the balance-sheet and notice of levy to the secretary of each Section.

AUDITORS.

Resolved—That Dr. Thomas and Dr. Manning, of Christchurch, be appointed auditors.

BALANCE-SHEET AND ANNUAL REPORT.

Resolved—That a copy of the annual report and balance-sheet be forwarded to each member of the Branch, with a notice on the back setting forth where the next annual meeting is to be held, who is the local secretary, and requesting payment of the annual subscription.

O. D. ACT.

Resolved—That the Council, having heard the papers on this subject by Dr. Symes and Fulton read and discussed, decides to postpone action in the matter for the present.

BY-LAWS OF THE AUCKLAND SECTION.

Resolved—That the secretary write to the Auckland Section, explaining the views of the Council in reference to some of the by-laws, and making suggestions thereon.

INSPECTION OF MEAT, SERUM FOR THERAPEUTICS, AND BACTERIOLOGICAL ESTABLISHMENT.

Dr. MASON (Parliamentary Secretary) reported that he had looked into these several matters, and obtained information respecting them from the Australasian Colonies. As far as he had been able to gather, there was no danger of infection being carried home through the export of carcasses from the colony. The diseases that afflicted the cattle of Russia and Canada were unknown in New Zealand, and the complaints made in reference to colonial meat arose mostly from the bad treatment the carcasses received in handling the same, and through bad thawing. The cost of appointing inspectors for this colony would be very great. He thought, however, that public abattoirs should be established, and that a medical officer of health should be appointed for each country. If this was done, diseased cattle could easily be traced. He would suggest that a report be prepared, proposing that such medical officers of health be appointed. It might be desirable to have inspectors of meat appointed, but the cost would be tremendous, and he did not think the objections which had been urged against the Ontarian cattle had ever been urged against meat from this colony. The appointment of medical officers would entail very little cost. Public abattoirs and more local inspection was what was wanted. With regard to a Bacteriological Institute, we were just as far ahead as they were in any of the colonies. We had a laboratory and a Government Bacteriologist. In West Australia, several of the hospitals had laboratories where experiments were conducted. He had not yet approached the New Zealand Government on the subject, but suggested that if the colony had a central laboratory it would be necessary to have small laboratories also in all the other chief centres, as not more than a day or a day and a half should elapse between the onset of the disease and the examination. Serum had been supplied by the Government of West Australia, but this had been discontinued on account of the complaints made by importers, who claimed that they suffered by the competition. He was glad to say that the question of vaccine had been put on a better footing since the Council had taken the matter up. Any medical man could

now get any quantity of calf lymph he required, and the only difficulty which now presented itself had reference to the course of the lymph. It appeared that this was the only colony where vaccine was given by the Government free. It could now be obtained from Dr. Wilford, of Patea, free of cost, by any medical man requiring it.

Resolved—That Dr. Mason approach the Government with the information he had already procured, and consult with them as to the advisability of establishing a bacteriological laboratory for the colony, and suggest that the Government keep a supply of anti-toxins for the use of the medical faculty.

This concluded the business.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Branch was held at the Royal Society's Room on Friday, 24th June, 1898. Present: Dr. W. Chisholm (President, in the chair), Drs. Crago, F. H. Quaife, Wright, Thring, MacCormick, Neill, Knaggs, Littlejohn, S. H. Hughes, Lillie, Coutie, Fairfax Ross, Clubbe, Cohen, Thomas, West, Tidswell, Flynn, Magnus, W. F. Quaife, Hankins, Macdonald Gill, Barrington, Jamieson, Gordon Craig, Walker-Smith, Brady, Hinder, J. Parker, Mills, T. S. Kirkland, McLroy, Dixon, Menzies, Clarence Read, Gledden, Martin. Visitors: Drs. Sinclair Gillies, and Chas. MacLaurin.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the nomination of Dr. Sinclair Gillies.

Dr. CRAGO exhibited a patient suffering from symmetrical enlargement of the epiphyses of the tibiae.

Dr. Thring showed, as a recent specimen, a uterus, together with both ovaries and Fallopian tubes, from the upper and right side of uterus a large single fibromyoma was growing. The specimen had been removed by operation five days previously. A good deal of the interest attaching to the case lay in the fact that four years ago the patient's abdomen had been opened by a specialist, with the intention of removing either the tumour or both sets of appendages. These latter, as can be seen by examining the specimen, it was quite impossible to get at, and the patient's abdomen was closed, nothing further being done. As the result of the first operation she became very seriously ill from septic peritonitis, and the abdomen was re-opened. Eventually she recovered, the tumour being *in statu quo*. During the last two years the tumour had increased rapidly, and was interfering with the patient's general health, besides causing pressure symptoms on the bladder and rectum. It was decided to remove the whole mass, leaving only the vaginal portion of the cervix uteri. This was done five days ago. The patient has gone on exceedingly well considering the severity of the operation. The temperature never rose above 99°4. She is entirely free from pain; the bowels have acted thoroughly and repeatedly, and she is, in fact, quite out of danger. The operation was a difficult one, the adhesions caused by the previous peritonitis being very extensive and dense. Examination of the specimen shows the ovaries to be so placed and incorporated with the tumour as to be quite out of reach, except by removal of the whole mass. The reason for interference was the gradual onset and increase of pressure symptoms due to interference with the bladder and rectum. These symptoms would, doubtless, before long have been followed by pressure upon one, or both

ureters. It is not necessary to interfere with every uterine fibroid, but to follow out the advice I have sometimes heard given, *i.e.*, "Oh, leave it alone fibroids never kill," is, I am sure, in some cases absolutely wrong. Independently of the inconvenience, fibroids do in some cases shorten life, more especially by causing pressure upon important neighbouring organs.

Dr. QUAIFFE read some notes on a case of gastric ulcer. (See page 281.)

Dr. JAMIESON said he had listened with great interest to Dr. Quaife's paper. He would like to ask if the urine was free from albumin. The case appeared to be one of chronic renal trouble. In the absence of valvular disease this would especially appear so.

Dr. WEST asked if there was any perforation of the stomach, and what was the cause of death.

Dr. F. H. QUAIFFE said the heart had become so full of blood that it could not contract. The heart was enormously enlarged. The patient had no fits, except in consequence of taking solid food; so long as he was kept on fluids he did pretty well. The cause of death was obscure.

Dr. T. S. KIRKLAND read some notes on a case of cerebellar abscess, following disease of the ear. (See page 308.)

The patient was exhibited and examined by the members.

Dr. BRADY demonstrated on a skull where the incisions were made in the exploratory examinations, and said that after seeing this case he would never despair, as he did not think at the time that there was any chance of recovery for the patient, but Dr. Kirkland persevered, and had been fully rewarded. There could be no question that the pus could not have been found by any other methods than those adopted in this case.

Dr. WILLIAM F. QUAIFFE said that Dr. Kirkland was to be thanked for the interesting case which he had placed before the meeting, and congratulated on its satisfactory progress. Such cases as this were hardly ever seen outside of a hospital, because they usually began in neglect and dirt; and it had always struck him very strongly that in brain cases generally the same amount of success could not be expected among patients of a higher social stamp as among those whose intellectual centres were in a more or less vegetative condition. With regard to the diagnosis of cerebellar lesions, the indications given us by the physiologists were almost wholly at fault. The injuries were probably too small and too asymmetrical to produce the typical ataxia and vertigo spoken of by them. Clinically also the signs were by no means characteristic, and fell for the most part very short of those displayed by the case in question, as to whose true nature there could have been no reasonable doubt. The frontal and occipital pain, the vertigo, the vomiting, the retraction of the head, and, not least, the optic neuritis, so characteristic of cerebellar tumours, were much less certainly found in abscess of the part. The reason was not clear. It might be a smaller pressure on neighbouring centres, or the fact to which Macewen had called our attention, that the true cerebral symptoms are often masked by the meningeal and thrombotic features of such a case, and do not assert themselves till the latter have been relieved. He himself remembered a case in Leipzig which turned out at the autopsy to be a strumous abscess of the cerebellum in a child, where the only nervous symptoms of any moment were the retraction of the neck, some nystagmus, and an indrawn abdomen; and optic neuritis was definitely ascertained for the first time by the microscope after death. With respect to the methods of operating in such cases, it seemed to him an unnecessary risk to delay the free opening of all septic tracts.

With all respect to the teachings of such an authority as Gruber, such practice hardly accorded with the best instincts of British surgery. The peril to the tender and vital brain tissue was altogether too serious for any temporising. It might be judicious where the cerebellar trouble was so clear as in this instance to make three distinct openings in the cranial wall for free access. For his part he would rather incline to favour an extension of the original mastoid opening by the chipping away of bony laminae, and the uplifting of *dura mater* along suspicious tracts, even at the risk of opening the sigmoid sinus, which, after all, in these days had been proved a matter of small moment. Where venous channels in the bone were oozing, might he be allowed to suggest for trial the use of a styptic, formed by the combination of tannin and antipyrin. Suitably prepared, this substance was so intensely glutinous that it could hardly be got away from the parts to which it had been brought in contact. For sealing up the mouths of gaping veins, and closing exploratory punctures in *dura mater*, it could be made of the most valuable assistance, the more especially as it was essentially antiseptic in its constitution.

Dr. CHISHOLM said: Dr. Kirkland is to be congratulated on his perseverance and success in a case of such difficulty, and it reminded him of a case in which he was associated with Drs. Brady and Newmarch, where the patient undoubtedly owed her life to the persistence of Dr. Newmarch, who eventually opened a cerebral abscess. In his experience of operations for the results of ear disease he could recall only one case in which the ear subsequently was quite dry and free from smell. In the others, so long as they remained under observation it was possible to detect slight moisture with an unpleasant odour, on introducing cotton wadding into the ear by means of a probe. He believed this has been the experience of others. The remarks as to the fate of the re-implanted bone are interesting. In a recent number of the *B. M. Journal* it is stated that when extensive areas of bone are re-implanted in broken up fragments, there is no doubt that absorption goes on until they are completely removed. Dr. Jamieson has mentioned a case in which the absolute union of the disc of trephined bone was demonstrated *post-mortem*.

Dr. MACCORMICK briefly described three cases of supra-pubic cystotomy, and showed a large number of calculi, and the enlarged lobe of a prostate. He said he owed them an apology for bringing these cases under their notice, but he did so as he understood there was a scarcity of material for that meeting. The cases were three consecutive ones in the same bed, and he had lately operated on them.

Case I., *et. 45*, had suffered for over two years from intermittent hæmaturia. The urine was offensive and alkaline, and could not be rendered permanently acid either by washing out the bladder with dilute mineral acids, or by the internal administration of boric acid. The prostate was enlarged, and no metal instrument could be passed. He opened the bladder above the pubes, and found three large calculi concealed behind the middle lobe of the prostate, which was enlarged to the size of a small orange. This was snared and cut off with a pair of scissors; hæmorrhage from the prostate was not excessive. The patient made an uninterrupted recovery, and has had no return of the hæmaturia. In this case Dr. MacCormick was ably assisted by Dr. Coutie.

Case II., a feeble old gentleman of 71, whose life was almost entirely devoted to passing the catheter. The prostate was enlarged; the urine was offensive and alkaline, and could not be rendered permanently acid by medicine or washing out the bladder. A solid instrument was passed with difficulty, but no stone

could be felt. Supra-pubic cystotomy was performed, and nine calculi, about the size of a pigeon's egg, were removed; they had been hidden behind the prostate. Considering the advanced age, feeble condition, and foul urine of the patient, the prostate was not interfered with. The bladder was drained, and recovery was uninterrupted.

Case III., an infirm bedridden old man of 71, who required the catheter every two hours. The prostate was enlarged, and a year before he had performed vasectomy, as the patient had refused an exploratory incision. The urine was offensive and alkaline. After he opened the bladder he removed 15 calculi, 12 large and 3 small ones, which had been hidden behind the prostate; they ranged in size from a cubic inch down to a pea. In this instance the bladder was sacculated. He made no attempt to remove the enlarged prostate, and the patient would most likely have died had he done so.

Dr. MACCORMICK said that he had formed the following conclusions:—

I.—That calculus is often an overlooked sequel to enlarged prostate.

II.—That patients with enlarged prostate, whose urine is alkaline and cannot be rendered acid by washing out the bladder with acids and internal administration of boracic acid, probably have a calculus, or ulceration and phosphatic concretion, and should be treated by a supra-pubic exploratory incision.

(a) In such a case, if the patient show signs of fair vitality with healthy kidneys, prostatectomy should be performed.

(b) If such a case be a feeble old man with urine of low specific gravity—unless the enlargement consist of a pedunculated lobe—the bladder should be drained, and the patient subsequently submitted to castration if he suffers from much inconvenience from the prostatic condition.

He found that the best way to drain the bladder was by means of Bunsen's filter-pump. The force of the siphon-action can be adjusted to prevent any injury to the bladder-walls. This drains the bladder as effectively as a perineal incision. He was indebted to Jacobson's surgery for the hint.

Dr. CHISHOLM said he would like to ask Dr. MacCormick if in those cases he has practised a transverse incision through the skin. Some importance of late has been attached to the line of incision through the skin in operations involving the abdominal wall. With regard to operations for stone he was personally somewhat impressed by a remark of the late Dr. Fortescue, who said that he had often wondered how many bladders a man damaged before he became an expert lithotrotist. For the surgeon who only gets an occasional case of stone in the bladder he thought a cutting operation was to be preferred. However, the choice of operation was one which must be decided by each surgeon for himself.

Dr. MACCORMICK said he had lately adopted the transverse semilunar incision for supra-pubic cystotomy, the advantage of which was that it followed the natural line of cleavage of the skin, and the wound-edges therefore tended to come together almost without suturing.

A CORRECTION.

Dr. Fiaschi writes:—"In the report of the discussion on Dr. Clubbe's paper on five cases of laparotomy for perforation of hollow viscera, appearing in your last issue, I am made to say 'that in the first case mentioned by Dr. Clubbe, no doubt the suggestion that

there must have been a small ulcer at the place of rupture was correct.' I said just the opposite. Sudden perforation of a hollow viscus from strain or injury, without any evidence of ulceration on the spot of puncture being present, is a fact that has been many times noticed. I quoted as good examples of the kind the two cases of rupture of the oesophagus referred to, by Sir Morell Mackenzie in his book on the Nose and Throat."

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 137th General Meeting was held on June 7th, 1898, in the Society's rooms.

Present: Dr. Wheeler (President), Drs. Francis, Gibson, Robertson, Carvosso, Hardie, Dennis, Halford, Byrne, Moloney, Love, and Turner.

Dr. Murray, of Mt. Morgan, was unanimously elected to membership.

ANOMALOUS CASE OF TYPHOID.

Dr. FRANCIS showed a temperature chart which he considered interesting as representing a class of case, the nature of which had been hitherto much in doubt. The child had been quite well until the temperature first rose, and then suffered from absolutely no symptoms beyond some headache at the commencement, and general languor. The temperature assumed a "hectic" character very suggestive of suppuration, being normal in the mornings. Careful examination failed to reveal any local cause, and Dr. Turner being called into consultation, made an examination of the blood, which gave a typical typhoid reaction.

Dr. TURNER said that in common with many other observers, he had long recognised the existence of mild cases of typhoid showing no symptoms beyond slight continued fever. But such cases could not formerly be diagnosed. The serum test would modify our views of the clinical nature of typhoid.

The PRESIDENT showed for Dr. NALL, who was prevented from being present, a case of leucocythæmia in a young male adult.

Dr. HARDIE read papers on a case of Hysterectomy (to appear in our next issue), and a case of Nephrectomy (see page 296).

ROYAL SOCIETY OF TASMANIA.

THE usual monthly meeting of the Medical Section was held on June 8th. Present: Drs. Bright, (President), Clark, Butler, Barnard, Alsop, Scott, Walch, Ireland, Spark, Giblin, Crouch and Sprott.

After several matters of routine had been dealt with, the President laid upon the table a draft of a "Bill to amend the law relating to vaccination."

Several suggestions were made and adopted.

The Secretary (Dr. Sprott) was instructed to forward the suggestions to the Launceston Medical Society; or, if possible, interview that Society, and learn if they had any suggestions to make, and report the same at next meeting.

A Special Meeting was held on the 17th, when Dr. SPROTT reported that he had interviewed the Launceston Medical Society, and that that Society had approved of all the suggestions made by the Hobart Society, and had also made several more, which he now submitted.

The recommendations of the Launceston Society were agreed to.

It was then resolved that a deputation, consisting of Drs. Butler, Crowther, Wolfhagen, and Sprott, representing the Hobart Society, and Drs. Drake and Sprott, representing the Launceston Medical Society, wait upon the President and members of the Central Board of Health, to urge upon that Board the necessity of introducing the above bill with the suggested alterations of the Medical Societies.

Principal suggestions made were:—Age limits to be six months. Calf lymph to be used if the parent desired it. All medical practitioners to be vaccinators, and patients to have the right to attend their own medical man. State to pay for all vaccinations unless the patient wishes to pay. No postponement of vaccination should be longer than three months. Vaccination to be retrospective for all children under 10 years of age. Permissive clause to be retained. Medical Inspector of Vaccination to be appointed to see that vaccination is efficiently carried out.

LETTERS TO THE EDITOR.

A QUESTION OF MEDICAL FEES CHARGED TO A MEDICAL STEPFATHER.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I would like an opinion from you on the following points:—A widow with one child marries a widower with several children. She then has a child by the second marriage, shortly after which the husband No. 2 dies. She now marries a third time, and has another child. This last husband is a medical man.

Husband No. 2 leaves his children provided for, beside a good provision for his widow.

Now comes the point on which I would like you to give an opinion. One of husband No. 2's children by his first wife, while on a visit here, contracts scarlatina, and I am called in to attend him.

When I render the account to the stepmother, who is his trustee, husband No. 3 sends it back, and says it is professional etiquette for one medical man to treat the family of a brother medico gratis. Is this a fair thing?

Here are practically four sets of children. The child I attended has neither father nor mother, but was left provided for by his father, so that he is not dependent on the medical man who marries the stepmother, and expects medical attendance free.

I am Sir, yours faithfully,

JOSEPH L. BEESTON.

30th May, 1898.

[It is as a matter of courtesy, not etiquette, for a medical practitioner not to charge another practitioner for professional attendance on himself, or any member of his family. This practice often entails extra expense upon persons so attended, some of whom deem it their duty to send valuable presents, far exceeding in cost the actual fees that would be paid for similar services to laymen. Instances have occurred to our knowledge where well-to-do members of the medical profession insist upon paying full fees to the colleague who attends himself or his family, and this is perfectly correct, as no well-thinking member of the profession would force an obligation upon a colleague. In the case referred to by our correspondent, he was perfectly correct in charging the fees for attendance, the patient having means independent of the medical stepfather, who could in no way suffer any loss thereby.—ED. A.M.G.]

MEDICAL ASSURANCE.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Permit me to endorse all that is contained in Dr. Treloar's letter on the above subject in your last issue. I, too, deplore the fact that no medical insurance society exists in New South Wales, and that no such tables embracing such cases as suggested by Dr. Treloar are issued by any of the Australian Insurance Companies. Being aware of this, a short time ago I wrote to the Secretary of the Medical Sickness Annuity and Life Assurance Society of Great Britain, asking if residents in the colonies could join their Society, and also asking him to give me particulars about the Home Society. I since received prospectuses, tables of rates, and report of that Society, which I submit to you. It appears that only practitioners residing in the United Kingdom are eligible for membership, so that we would be obliged to have a society of our own, or, as Dr. Treloar suggests, approach some well-established life assurance society on the subject.

I could not venture to ask you to publish this printed information, as I know your space is limited; it is sufficient to say that from the reports the Home Society is in a very flourishing condition, that it has the patronage of medical men of fame and repute, the late Mr. Ernest Hart having been president; the chairman now is Dr. de Havilland Hall, and amongst office-bearers are names of Drs. Herman, Ord, Stephen Mackenzie, and Professor Gairdner, of Glasgow. Their last annual report, printed in the *British Medical Journal* lately, showed a great increase of funds and membership, over \$115,000 being amount of reserves.

I should like to see some steps taken by the profession in this direction; at present medical men cannot provide against loss through sickness. Whether it would be better to have a separate society, or ask some Insurance Company to take the matter up, is for the general body of the profession to decide.

I am, Sir, etc.,

E. H. BINNEY.

197 Elizabeth Street, Hyde Park.

[Dr. Binney has forwarded the prospectus, etc., of the Medical Sickness Annuity and Life Assurance Friendly Society (London), which we shall be happy to place at the disposal of any members who wish to take up this important matter.—ED. A.M.G.]

REVIEW.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY, 1898. Edited by George M. Gould, M.D. Illustrated. Philadelphia: W. B. Saunders. Sydney: L. Bruck.

The American Year-Book comes to us in familiar dress. We have had occasion to speak favourably of the preceding issues, and we feel compelled to repeat our praise in favour of this year's volume. The large sale of the 1897 edition left no doubt as to the usefulness of the work and its appreciation by the profession. The medical literature of the world has been laid under contribution for its pages, and the *A. M. Gazette* is freely quoted from. Among the Australian writers quoted are Drs. Connolly (Brisbane), Gill (Sydney), Ross (Sydney), Mullins (Sydney), Altman (S.A.), Hogg and Anderson. The papers quoted from were originally published in our columns.

Dr. Gould is to be congratulated on the production of this work. The illustrations are numerous and appropriate, and the volume is fully equal in finish to those which Mr. Saunders has issued in previous years.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
H. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH JULY, 1898.

EDITORIALS.

FEDERATION:

UNIVERSITY AND PRIMARY EDUCATION.

WE regret that the terms of the Convention Bill were such that it was not carried by an overwhelming majority on June 3rd throughout Australia. Last year we advocated the inclusion in the Bill of a clause providing for the establishment of a National University of Australia, non-teaching in its character, and

with power to indicate curricula for degrees and courses of studies for the primary schools, &c.* Such a course was recommended by us because it was believed that thereby a greater feeling of unity would be developed amongst the children attending the schools throughout the Commonwealth, and, secondly, the prestige of Australian University degrees would be raised commensurately with the prestige of the Commonwealth itself. However, the only permission under the late Convention Bill for establishing such a University was that afforded by the excellent clause which provided that the federal capital should be in federal territory.† That is to say, had the Bill been carried, there would have been a federal territory, and this being so it would have been competent for the federal authority to have established an educational system in such territory, including schools and a University, and it is probable that the latter would have been called the University of Australia. Such a state of affairs would have been very satisfactory, and it is possible that hundreds of students would have availed themselves of the advantages of this federal institution.

We rejoice to say that the prospect for such a national system of education has not been damaged by the rejection of the Bill, for it appears that, in order to more accurately adjust the great financial difficulty that stands in the way of union, it is necessary that the cost of education in the colonies should be handed over to the Federal Parliament. It is satisfactory to find that the reasons cited by us last year, when dealing with this question, are now supported by others of a potent financial character.

The Premier of New South Wales (the Right Hon. G. H. Reid), on July 4th, in an eloquent address to his party, and when dealing with the financial provisions of the Bill, said: "I have come to the conclusion that there is only one system possible in its place, and that is that the railways and public debts should be handed over to the federation, and it would even be necessary, *whether you handed over the control of the schools or not, to hand over the cost of education in the colonies*"‡

The Chancellor of the University of Sydney (The Hon. H. N. MacLaurin, M.D.), on July 6th, in a splendid speech delivered in the Upper House of the New South Wales Parliament, and when referring to the same financial problems, said, "I am inclined to look with con-

* Vide Editorial, Aug. 30th 1897.

† Federal Convention Bill, Chap. vii., Clause 1.

‡ Sydney Morning Herald, July 5th, 1898.

siderable favour upon the proposal which has been made to add to what has been already adopted by the Convention, the transference of the railways, the funded and unfunded debts, and provisions for primary instruction."*

The financial Editor of the *Sydney Daily Telegraph* (Mr. R. L. Nash), in a series of articles upon federal finance, which appeared in his journal after the Sydney Convention last year, showed, amongst other able conclusions, that by transferring the cost of education from the States to the Federation, the financial problem would be enormously simplified, if not settled.†

These authorities have given their figures, but it is not necessary for our purpose to quote more than the above. It will thus be seen that some good measure of federal education has very substantial support.

Our desire is to see a national University of Australia established, upon the lines indicated by us on August 20th last year, for such an institution would, we repeat, greatly tend to raise the status of Australian medical degrees throughout the world.

LEAD POISONING.

THE numerous cases of lead poisoning which have recently been observed in Brisbane have drawn the attention of the profession throughout Australia to the various methods by which such poisoning occurs.

We know that a frequent cause of lead poisoning, in former days, was the passage of drinking water through lead pipes or tanks. A very small quantity of lead dissolved in water will in time produce the characteristic symptoms. Some waters, such as those which contain carbonates or sulphates, have but little action upon lead, while pure water containing much oxygen, or water in which are contained nitrates, nitrites, chlorides, or organic matters, have free action. It is said that even one-fortieth to one-fiftieth of a grain of lead per gallon may cause symptoms.

Lead poisoning has been known to occur through the employment of oxide of lead in sweetening wines, or the soluble salts in hair-dyes. Snuff-takers suffer from adulteration of the snuff with lead, and colour-grinders inhale the fine particles of the carbonate which is the basis of most paints. Painters have introduced the metal into the system by eating their meals with unwashed hands.

In August, 1895, the State Board of Health of Massachusetts, U.S.A., received information that several cases of lead poisoning had occurred

at Kingston, in that State. The Board caused an investigation to be made, which showed conclusively that no less than twenty-five of the consumers of the water of the public supply at Kingston presented symptoms of lead poisoning. The following conditions were also found to exist:—An unusually free use of lead pipe through the town. The service pipes were all of lead, and the average distance of the houses from the street was greater than that which prevails in most towns, so that longer pipes were necessary for supplying the houses. In several instances some hundreds of feet of lead piping were used to connect the house with the main, and in these instances the most severe cases of lead-poisoning occurred. In one instance, where there were long stretches of lead pipe, the people did not suffer, and in these cases it was found that care was taken not to use the water which had remained in the pipes overnight, but to let it run off before using. Samples of water were obtained from the taps in several houses, the water having been allowed to stand overnight in the pipes, and in nearly every instance the amount of lead found to exist in such samples was found to be considerably beyond the limits usually regarded as dangerous to health. The amounts were found to be as high as $\frac{1}{4}$, $\frac{1}{3}$, and $\frac{1}{2}$ grains per gallon. The Board of Health recommended the immediate removal of all lead pipes in the town, wherever they were used for conveying water for domestic use, either as service pipes or as street mains.

It is said that in Brisbane the pipes in which the water is carried from the street mains to the houses of the consumers are of lead. If this be so, we cannot wonder at the numerous cases of poisoning observed.

The use of leaden water pipes should everywhere be condemned as productive of such a distressing and painful disorder.

PROFESSIONAL TESTIMONIALS.

DOUBTLESS most professional men who have held hospital appointments have, at times, been very awkwardly placed in regard to testimonials. While being really anxious to help a young graduate, they have perhaps felt hardly justified in giving a testimonial. Under these circumstances it would have been a good plan for those giving testimonials to have followed the example of Mr. Christopher Heath, who, writing on the subject a year or so ago, said that he never refused to certify that "Mr. Jones has had every opportunity of thoroughly learning his profession." And, having given this valuable testimony, their conscience might

* *Sydney Morning Herald*, July 7th 1898.

† *Sydney Daily Telegraph*, Sept. 6th to 9th, 1897.

feel more easy. Judging from the following cutting which appeared in both the South Australian daily papers, the good-natured man is faced by another difficulty :—

THE ADELAIDE HOSPITAL.

"At the meeting of the Executive Council on Wednesday, June 22, the appointments of Harriett Eliza Biffin, M.B., Ch.M., and Ellen Maude Wood, L.R.C.P. and S., Edin., L.F.S. and P. Glas., L.M. Dublin, as Resident Medical Officers, as recommended by the Board of Management, was confirmed. The first medico graduated at the Sydney University, and holds testimonials from Dr. Sawkins, the Medical Superintendent of the Prince Alfred Hospital, Sydney; Dr. Foreman, Lecturer on Gynaecology at the Sydney University; Dr. Graham, Lecturer on Midwifery, Sydney University; Dr. Knaggs, Lecturer in Clinical Surgery, and Surgeon to the Prince Alfred Hospital, Sydney; Dr. Dixon, Lecturer in Mat. Medica, Sydney University, and Senior Hon. Physician Sydney Hospital; Dr. Binney, Medical Superintendent Sydney Hospital; and other professors and doctors connected with the Prince Alfred and Sydney Hospitals, and Sydney University.

Dr. Wood has testimonials from Dr. W. H. Battle, Surgeon to the Royal Free Hospital, London; Dr. F. W. Kidd, Master of the Coombe Lying-in Obstetrical Section of the Royal Academy of Medicine, Ireland; Dr. Samuel West, Senior Physician of the Royal Free Hospital, London; Dr. M. Dockrell, Physician to St. John's Hospital for Diseases of the Skin; Professor C. Mercer, of the London School of Medicine; Dr. J. G. Stevens, Gynaecologist of the Jervis-street Hospital, Dublin; and other Professors connected with the Royal Free Hospital and Coombe Hospital."

We are quite sure that those gentlemen who gave these testimonials, never for a moment anticipated that their names would be paraded in the lay press, or that their names would be dragged into a side issue arising out of the Adelaide Hospital dispute, and thereby make them to appear to be partizans on one side of the question. It is a matter for congratulation to those gentlemen who have given testimonials to these ladies, that their testimonials have not been published in full in the daily press, especially as the publication of the names of the givers of these testimonials has evidently been made with a view of making popular these new appointments to the Adelaide Hospital, to the detriment of some of the profession in South Australia. Professors and Lecturers in our Schools of Medicine should be careful to caution those of their graduates to whom they give testimonials that they should not be flaunted before the general public, nor distributed *ad libitum* amongst their patients, with a view of obtaining temporary *ecclat*. We regret that very often such testimonials are frequently used in this manner for the aggrandisement and glorification of the recipients.

The practical lessons to be gained by this new development in the testimonial line are,

that it is unsafe to affix one's name to any letter of the kind, however apparently innocuous; and that rigid care should be exercised in giving testimonials.

ADAMS v. BROOKES.

AN ACTION FOR DAMAGES AGAINST A MEDICAL MAN IN SOUTH AUSTRALIA.

THE facts in this case are these. Dr. Brookes is the Surgeon to the Stockade, a labour prison, nearly equally distant from Adelaide and the township of Salisbury, where Dr. Brookes resides. His duties entail a daily visit to the Stockade on week-days, but at no stated time. Dr. Brookes has to attend, professionally, all the officials and employees at the jail, but not their wives and families other than as private patients. Adams was a warder at the Stockade in November, 1897. One Friday evening, in November, 1897, Adams mixed some powder known as "Death to Rats," with some sugar and water for the purpose of destroying some of the flies which were very troublesome. On the morning of Saturday, his little girl got at the dish on which this was placed, and took some. She died on the following Sunday evening or early on Monday morning. It is in connection with this death that the action was brought; Adams charging Dr. Brookes with so negligently treating the child that in consequence of his neglect the child died. He claimed £99 damages. An inquest was held before the burial with a verdict that the child died from arsenical poisoning by taking "Death to Rats," and that no blame was attachable to anyone. It is worth noting that no *post-mortem* was ordered or made; also that no reference was made to the carelessness of the parents in leaving a poison within reach of so young a child. No evidence was led to show how much of the poison had been taken.

The child was supposed to have taken poison at 9 a.m. on the Saturday. An emetic was given by the father, but medical aid was not sent for. The anxiety of the parents for the child's welfare spent itself in frequent goings up to the prison gates, two minutes' walk from their cottage, to see if the doctor had come for his daily visit. The jail is connected with Salisbury by telephone, but no attempt seems to have been made to let the doctor know. About 2.50 p.m. Dr. Brookes arrived, and is told that a child had taken "Death to Rats." He at once went down to the cottage, found that an emetic had been given so soon as it was discovered the stuff had been taken, and that free

vomiting had followed. It was now six hours since the poison had been taken, and he was told that no vomiting had occurred for four hours—that there had been no purging at all, and no straining (tenesmus). He was also told that the child had been poorly and restless the night before. He also knew that it had suffered from an attack of inflammation of the lungs. Finding the child somewhat pale and depressed, and without any urgent symptoms of arsenical poisoning, he examined carefully and found some bronchial râles over the whole of the chest. The temperature was 98.4°, there was no obvious cough. He concluded that the arsenic, if any had been taken, had been thrown off, and that the catarrhal signs in the chest, together with the emesis induced were sufficient to account for all. He designated this catarrhal condition as "some bronchitis," and warned the mother that the child might get worse. He prescribed a mixture, consisting of Spt. Ammon., Liq. Ammon. Acet., Spt. Aeth. Nit and Syrup, and a stimulating liniment for external use.

He ordered the child to be kept warm in bed, and a milk food and other bland, unirritating dietary. The child, however, continued to get worse, but no message was sent to acquaint the doctor. On Sunday he did not go over, not hearing from the parents. The case seems to have progressed steadily in an unfavourable manner. At 10 p.m. on Sunday the parents telephoned to Dr. W. A. Verco, who went out. He found the child practically moribund, but exhibiting distinct evidences of bronchitis. Two or three hours later the child died.

Five months later this action is brought—a charge of neglect is brought against the doctor by parents who, when their child was supposed to have taken poison, did not send for medical aid, but waited on in an aimless way for six hours, then allowed another thirty hours to go on with the child gradually getting worse, without making the least effort to let the doctor know, although they could have done so by just walking up to the Stockade and using the telephone. On the Sunday, as it happened, Dr. Brookes was called to Two Wells, 17 miles in an opposite direction, taking him some 25 miles from the Stockade. The ordinary lay mind at once takes the same view that the professional one does, viz., that whatever neglect may be attributed to the doctor, there was absolute, and little less than criminal neglect on the part of the parents.

Looked at in the light of later events, there can be no doubt that the child really did die

from arsenical poisoning, and that the rapid and shallow breathing, with the râles, led Dr. Brookes to attribute this to the condition of the chest, and not to stomachic and intestinal irritation. We can be all wise after an event, but arsenical poisoning is not so common a complaint that every one is conversant with the symptoms. There seems to have been a careful inquiry into circumstances and symptoms, and a rational line of treatment laid down.

The medical evidence called for the parents was given by Dr. Ramsay Smith. He stated that it was a clear case of arsenical poisoning, also that in every case of suspected poisoning it was the doctor's duty to collect evidence of poison having been given, in saving and sealing vomited matters, etc., and also that it was his duty to remain within call. He also stated that it would be easy to confound the symptoms which were due to stomach irritation with bronchial symptoms. Also, that a country practitioner would not be expected to have a forensic knowledge contained in a Taylor or Guy Ferrier, etc., at his fingers' ends. The prescription was an excellent one for bronchitis if it had been bronchitis the child was suffering from, but in the condition of stomach irritation it was decidedly hurtful. He thought the arsenic had been thrown off by the emetic, and that as children stand arsenic well that it had not absorbed sufficient to hurt. The child died from exhaustion, following upon stomach irritation due to the arsenic, which was kept up and accentuated by the ammonia Dr. Brookes had prescribed.

The bottle of medicine was produced in court. The mother stated in her evidence that a mistake was made at first, and only half a teaspoonful given instead of half a tablespoonful. The appearance of the bottle bore out this statement. It appears that two doses were given, each containing 2½ minims of Sal Volatile and one of 10 minims. Even if it is admitted that mx is a full dose for a child a little over two years, it is impossible to agree with the medical evidence for the prosecution that 15 drops of Sal Volatile in three doses would produce the fatal results. The depression called for stimulation and for diffusible stimulants, and ammonia freely diluted and given with barley water or milk could do no harm. It is quite evident that the doctor had overlooked the actual amount given.

The strange part in the case is the action of the parents. Salisbury and the Stockade are connected by telephone—but, although warned by Dr. Brookes that the child might get worse, they took no steps to acquaint him with the

further issues of the case. Mr. Piper asked if there was any evidence to go to the jury. Mr. Commissioner Russell, in reply, gave a careful summing up of the case, pronouncing a non-suit on the ground that no action can lie for damages dependent on the death of another.

Mr. McLachlan gave notice of appeal. This appeal was heard and the non-suit was upheld by the Full Court.

It is worthy of note that Dr. W. A. Verco was not called by the prosecution. Drs. W. A. Verco, Lendon, H. H. Wigg and Bickle were subpoenaed by the Counsel for the defence, but were not called on.

The Chief Justice's decision on the appeal was:

1st. He was not prepared to dissent from the learned Commissioner, and he understood from his colleague and saw they were wrong, and that there was evidence of negligence.

2nd. That the action was expressly based upon the death of the child, which the law says shall not be a cause of action.

3rd. That the damage recoverable is not an appreciable amount, and lastly that substantial Justice has been done. He concluded the rule should be discharged.

His Honor, Sir J. P. Boucaut, agreed on the whole that substantial justice had been done. Before the plaintiff could recover, he must show negligence, and he could not see that a tittle of evidence of negligence was proved. There was nothing in the evidence upon which a professional man could be charged with negligence. He thought the Judgment met the case and as there was nothing whatever to show contrary, he thought the non-suit given by the learned Commissioner in the case was right.

PUBLIC HEALTH.

RECENTLY the Victorian Board of Public Health recommended the Government to send Dr. Howard, one of the Board's health officers, to India, to make personal inquiries into the conditions and symptoms of the bubonic plague, and the circumstances under which it spreads. The Premier has informed the Board that he cannot see his way to acquiesce in its recommendation, notwithstanding that Dr. Howard was prepared to fulfil the commission for £150, and to spend three or four months in the investigation without salary.

It appears that some medical men in New South Wales have been rather negligent in reporting cases of infectious diseases forthwith to the local authorities, in spite of the fact that they are paid for doing so. The Board of Health wishes attention to be drawn to the fact that there is a penalty of £5 for neglect to carry out this portion of the law.

The Metropolitan Drainage Board of Hobart has decided to ask Parliament for power to borrow £100,000 for the purpose of carrying out a system of

sewerage and drainage for the city of Hobart and suburbs.

A deputation of medical men, representing the medical societies of Hobart and Launceston, waited on the President of the Central Board of Health on June 21, asking him to introduce a bill during the present session to carry out vaccination on the lines recommended by the Royal Commission in England. The Hon. G. H. Butler introduced the deputation. The speakers were Drs. E. L. Crowther, M.H.A., Gregory Sprott, Drake, Wolfhagen, and others. A number of points were suggested by Mr. A. Mault, secretary to the Central Board of Health, upon which the opinion of the medical men present was taken. The latter appeared to think that children should be vaccinated before they were six months old; that calf lymph, as distinguished from arm to arm vaccination, was best; that no postponement should be for longer than three months; that patients should have the right to go to their own medical men; that the permissive clause should be retained. Sir Philip Fysh mentioned that vaccinators would have to be sent into outlying districts. An understanding having been arrived at that the suggestions of the medical men would be given effect to, and that the bill would be re-drafted and again submitted to the medical societies, the proceedings terminated.

Dr. A. E. Perkins has been duly authorised by the N.S.W. Board of Health to exercise the powers of inspection and other powers under Section 5 of the Diseased Animals and Meat Act.

VITAL STATISTICS.

SYDNEY.—There were 981 births and 483 deaths registered in Sydney during May. The principal causes of death were:—Diphtheria, 10; typhoid fever 10; bronchitis, 20; pneumonia, 18; cancer, 14; phthisis, 45; enteritis, 32. There was 1 death from leprosy at Little Bay, the victim being a young man, aged 30, a native of New South Wales.

MELBOURNE.—The chief causes of death in greater Melbourne during May were as follows:—Measles, 80; diphtheria, 12; typhoid fever, 35; puerperal fever, 5; cancer, 38; phthisis, 64. There were in all 1,139 births and 699 deaths registered during the month.

HOBART.—Dr. Sprott reports that during the month of May there were 56 deaths registered in the registration district of Hobart. There were 35 deaths—males 21, females 14—in the city proper. The principal causes of death were:—Typhoid fever, 4; cancer, 2; old age, 4; convulsions, 2; heart disease, 2; bronchitis, 2; pneumonia, 1; pleurisy, 1; enteritis, 2; infantile debility, 3; and the remainder were of a general nature.

BRISBANE.—During the month of April there were 3 deaths from typhoid fever, 4 from dengue fever, 5 from whooping cough, 9 from cancer, 3 from phthisis. During May the deaths were:—Scarlet fever, 2; dengue fever, 3; whooping cough, 2; diphtheria, 1; cancer, 6; phthisis, 17.

NEW ZEALAND.—May, 1898. Chief causes of death:—*Auckland*—Typhoid fever, 5; cancer, 3; phthisis, 4. *Wellington*—Typhoid fever, 3; cancer, 7; phthisis, 8. *Christchurch*—Cancer, 8; phthisis, 3. *Dunedin*—Diarrhoea, 3; heart disease, 6.

ADELAIDE.—The following were the chief causes of death in May:—Enteric fever, 4; diarrhoea, 5; cancer, 3; phthisis, 13.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

BRISBANE HOSPITAL.—Drs. Marks, Taylor, and Hirschfeld have been re-appointed to the Honorary Staff. The Queensland Government has accepted the offer of the Brisbane Hospital Committee for the establishment of an Inebriates' Retreat.

HOSPITAL FOR SICK CHILDREN, SYDNEY.—Dr. MacDonald Gill has been appointed Honorary Assistant Physician, and Miss Carlyle Thomas, Junior House Surgeon.

SYDNEY HOSPITAL.—At a meeting of the Board of Directors a report was presented by the Committee appointed to inquire into the finances of the institution. The Committee suggested—(a) That the number of patients admitted for treatment each day should be limited, except in those cases which require urgent treatment; (b) That after a patient has been under treatment for one month he should be discharged and re-admitted again if the medical officer deems it essential; (c) That as far as possible patients who seek the relief of the out-door department should be made to attend the hospital which is nearest to the place where they reside. A discussion followed upon some suggestions with regard to advertising, and a proposal to reduce the stipend of the nurses from £20 to £16 was rejected. A number of other suggestions were made regarding the salaries of certain officers. The report, with the exception of that portion dealing with the training and rate of pay of the nurses, was adopted.

The Adelaide Hospital Board has decided to establish a bacteriological laboratory, fitted up with all the latest scientific appliances, with the bequest of £3,000 from the late Sir Thomas Elder. Miss Biffin, M.B. Syd., and Miss Wood, L.R.C.P. Ed., have been appointed resident medical officers of the hospital.

Dr. E. M. Owens, formerly of Brisbane, and latterly of Castlemaine, Vic., and now in Europe, has obtained the degree of M.D. Brussels, with honours in medicine.

MEDICAL NOTES.

HIS Excellency the Governor-in-Council of South Australia has been pleased to appoint the Hon. J. A. Cockburn, M.D. Lond., to be Agent-General for South Australia, *vice* the Hon. T. Playford, resigned.

Medical Magistrates.—Dr. Charles James Kearney, of South Grafton, N.S.W., and Dr. J. L. Murray, of Brisbane, Q., have been made Magistrates of their respective colonies.

Dr. Gregory Sprott, of Hobart, who has been seriously ill, is again able to resume his duties.

Dr. McKenna, of Shepparton, Vic., when driving near Mooroopna, was thrown from his vehicle and sustained a fracture of the left upper arm.

Dr. R. Bennett, of Gulcong, N.S.W., has sustained a curious and painful accident. As he turned round quickly in his bedroom his thigh snapped. He was taken to the Hospital, where the bone was set successfully by Dr. M'Creadie.

Presentations to Medical men.—Dr. D. Collingwood, of Summerhill near Sydney, was, on June 22nd, entertained at a dinner by professional and other friends, and made the recipient of a handsome travelling bag, fitted with gold-mounted toilet requisites, the occasion being his departure for an extended visit to Europe with his wife and family.

Dr. Manly, recently of Wedderburn, Vic., has been entertained at a banquet, the occasion being the eve of his departure to Melbourne.

OBITUARY.

WILLIAM AUGUSTUS DOBBYN, L.A.H., Dub., 1850; M.R.C.S., Eng., 1881; resident surgeon of the Ovens District Hospital, died at Beechworth, Vic., on June 10, aged 68 years.

CHANGE OF ADDRESS, &c.

ALLAN, Dr. R. J., has removed from Dulwich Hill to Chatswood, near Sydney.

BOYD, Dr. A. B., has removed from Christchurch to Nelson, N.Z.

BRAY, Dr. E. J., has succeeded to Dr. O. Howes's practice at Wingham, N.S.W.

BROCKWAY, Dr. Archibald B., has left Southport, Q., and has commenced practice at 3 Maxwell Place, Ann Street, Brisbane.

BROINOWSKI, Dr. G. H., has succeeded to the practice of Dr. Hugh Armstrong, at Hay, N.S.W.

COLLINGWOOD, Dr. D., of Summerhill, near Sydney, has left per S.S. "Thermopylae" on an extended visit to England.

DAMMAN, Dr. G. W., has succeeded to the practice of the late Dr. Collins, at Deloraine, Tas.

GREGG, Dr. —, a recent arrival, has purchased the practice of Dr. Manly at Wedderburn, Vic.

FABRELL, Dr. R. M., has settled at Quirindi, N.S.W.

HEALY, Dr. J. J. S., has removed from North Fitzroy to Yackandandah, Vic.

HEALY, Dr. W. J., has commenced practice at Mt. Malcolm, W. A.

KEALY, Dr. J. P., has removed from Tumut, N.S.W., to Roma, Q.

KELLY, Dr. J. J., will act as *locum tenens* for Dr. Collingwood, of Summerhill, near Sydney.

KIERNANDER, Dr. H. B., has left Emu Bay, Tas., for Sydney, Dr. Stanley is acting as *locum tenens*.

LITTLE, Dr. J. H., has returned to Brisbane after an absence of three years in the Home country.

MANLY, Dr., of Wedderburn, Vic., has disposed of his practice to Dr. Gregg, a recent arrival.

MACGOWAN, Dr., of the Hobart Hospital, is on sick leave, his place, as Assistant House Surgeon, being taken by a *locum tenens*.

MCCARTHY, Dr. De Lacey, has left Zeehan for Sheffield, Tas.

MORICE, Dr. R. J., has left Tenterfield, N.S.W.

MULLER, Dr. O. R. P., has removed from Hill End to Lismore, N.S.W.

OLINEY, Dr. W. J., has removed from Cne to Lawlers, W. A.

OWENS, Dr. E. M., lately of Castlemaine, Vic., and now in Europe, will return to Australia in August.

PRING, Dr. A., late of Uralla, has succeeded to Dr. R. J. Morice's practice at Tenterfield, N.S.W.

ROBERTS, Dr. LEE W., late of Fiji, has succeeded to the practice of Dr. J. Stewart, Walhalla, Vic.

ROSS, Dr. M. W., formerly of Dunedin, has settled at Petone, near Wellington, N.Z.

MEDICAL APPOINTMENTS.

The following medical appointments are announced:—

Barrington, Fournes, M.B. Edin., F.R.C.S. Eng., to be Honorary Surgeon to Lewisham Hospital for Women and Children, Sydney.

Duncan, S. V., M.R.C.S. Eng., &c., to be Public Vaccinator for Urban, and suburban districts of Menzies, W.A.

Harding, Dr. R. F., to be Acting Medical Superintendent for the Hospital for Insane at Toowoomba, Q. during the absence of the Medical Superintendent on sick leave.

Lawson, Dr. G. L. L., M.R.C.S. Eng., D.P.H., R.C.P. Edin. to be Public Vaccinator for Urban, and Suburban districts of Yalgoo, W.A.

Lethbridge, C. F., M.B.C.S. Eng., &c., to be Officer of Health for the N. and W. Ridings of Ripon Shire, Vic., vice Dr. B. J. Adam, resigned.

Lomergan, T. J., L.F.P. & S. Glas., &c., to be a Public Vaccinator for S.A.

Morgan, Cosby W., M.D. Brux., &c., to be Government Medical Officer and Vaccinator for district of Eden, N.S.W.

Mullen, W. L., M.D., &c., to be Acting Medical Superintendent of Sunbury Lunatic Asylum, Vic., during the absence of Dr. J. A. O'Brien, on leave.

Oliver, W. J., M.R.C.S. Eng., &c., to be Health Officer for Lawlers, W.A.

Powell, H. A., M.B. Adel., &c., to be Medical Officer at Kadina, S.A., vice Dr. Robinson, resigned.

Thomas, Julia, M.B. Syd., &c., to be Resident Surgeon at the Children's Hospital, Sydney.

Wilson, Dr. G. B., to be Medical Officer to destitute poor for township of Port Germeln, S.A.

Wilson, Dr. T., to be Health Officer at Coddlingwarra, W.A.

MEDICAL RESIGNATIONS.

The following medical resignations are announced :—

Adam, Dr. B. J., as Officer of Health for the N. and W. Ridings of Ripon Shire, Vic.

Robinson, Dr.—, as Medical Officer at Kadina, S.A.

REVIEWS.

ANNUAL AND ANALYTICAL CYCLOPEDIA OF PRACTICAL MEDICINE. By Charles E. Sajous, M.D., and one hundred Associate Editors, assisted by Corresponding Editors, Collaborators, and Correspondents. Illustrated by chromo-lithographs, engravings, and maps. Volume I. Philadelphia : The F. A. Davis Company, 1898.

FIRST NOTICE.

We have received the first volume of this work, which now supersedes what was known as Sajous' Annual of the Universal Medical Sciences, the first issue, in five volumes, of which took place about ten years ago. The present issue, we are informed in the preface, is to be an improvement on the previous one. The volume now under notice extends from abdominal injuries to Bright's disease, which gives some indication of the scope of the future volumes. This series has been published with the object of facilitating the professional labours of medical practitioners, surgeons, and specialists. General medical practitioners are informed that they will find therein suggestions innumerable, not only those usually considered in classical works, but also on every practical point worth recording, found in the literature of the last decade. Lecturers are assured that they can find here their lecture practically prepared for them, with examples, cases, warnings, and suggestions such as would be calculated to strengthen the points necessary to be brought before their classes. For writers it is contended that in a concise form they will have ready to hand the literature upon each subject treated therein, so as to save the labour and trouble of spending time in medical libraries, or even of reading medical literature in foreign languages. Regarding the subject of recent literature, this is clearly separated from the rest under proper headings designated the Literature of 1896-97. The matter is so arranged and printed in four classes of type—large black-faced type for headings, smaller black-faced type for sub-headings, good-sized print for the ordinary text, and a smaller type for references and for text which is not considered particularly valuable. This excellent arrangement enables the reader, if his time is limited, and he desires particulars relating to a

special stage of a disease merely, or the treatment for it, to read the text in the large type, which has been excellently prepared by medical writers of exceptional ability. Those who have more time at their disposal, and who wish to enter fully into particulars of the literature on the subject, can read the text in the smaller type. The book consists of 600 pages, the text being printed in double columns somewhat similar to those in the *Australasian Medical Gazette*. We welcome it as being a most valuable contribution to the literature of the medical sciences.

The following subjects are treated in this volume :— Abdominal injuries, abortion, abscess, absinthium, acetanilid, acetic acid, acetoneuria, aceto-ortho-toluid, acetylene, acne, aconite, aconitine, acromegaly, actinomycosis, actol, Addison's disease, adenitis, adhatoda justicia, adhesol, adonis, agalactia, agaricin, agathin, ailantus, ainhum, airol, alangine, albuminuria, alcohol, aldehydic acid, alembroth, alexina, alkaloids, allyl, aloes, alopecia, alpol, alum, aluminium, alumnol, amenorrhoea, aminol, ammonium, amygdophenol, amylen, amyloform, amyl-valerianate, anaemia, anaesthesia, analgen, anemonin, anesin, aneurism, angina pectoris, anhalonium Lewinii, anilipyrin, animal extracts, anorexia nervosa, anthrabin, anthrax, antipyrine, aphasia, apiol, spocynum cannabinum, apomorphine, appendicitis, argentamine, argonin, aristol, arsenic, aseptic acid, asaprol, asthma, astigmatism, athetosis, atropine, barium, Barlow's disease, belladonna, beri beri, blackwater fever, blepharitis and blepharadenitis, and Bright's disease.

THE BRITISH PHARMACOPEIA, 1898.

Messrs. Angus and Robertson have forwarded us a copy of the New Pharmacopoeia which has just appeared. The alterations are somewhat numerous, too numerous for special mention in our columns, but many of them are important. The composition of some of the preparations, the strength of others have been altered, and every medical man should at once provide himself with the British Pharmacopoeia, 1898, as soon as possible. Unfortunately, no day has been set apart in Australia on which the alterations will take effect, and it would, therefore, be well if the profession would indicate in some manner in prescriptions whether the new or old preparations are required.

THE RÖNTGEN RAYS IN MEDICAL WORK. By David Walsh, M.D. Edin., Physician Western Skin Hospital, London, etc. With an introductory section by J. E. Greenhill. London : Baillière, Tindall & Cox. Sydney : L. Bruck. 1897. Price, 7s.

Since Professor Röntgen published his famous discovery to the world some two years ago, a number of publications bearing upon the new science have been issued in all quarters of the globe. In the volume before us, the aim has been to deal with the present practical scope of the X Rays so far as physicians and surgeons are concerned. In this endeavour the author has been remarkably successful.

An introductory section, dealing with electrical apparatus and methods, by Mr. Greenhill is exceedingly useful.

Dr. Walsh has given us a book which we may all take up and study well. Not only are the uses of the Rays for medical and surgical purposes demonstrated satisfactorily, but the author shows that the skiagraph may be valuable in medico-legal cases. The work contains much more than the ordinary medical practitioner needs to know. The surgeon and the expert may study it with profit and interest. There are fifty-eight illustrations, which are well reproduced from photographs.

A HANDBOOK OF THERAPEUTICS. By Sydney Ringer, M.D., F.R.S., Holme Professor of Clinical Medicine, University College, Physician to University College Hospital; and Harrington Sainsbury, M.D., F.R.C.P., Physician to the Royal Free Hospital, and the City of London Hospital for Diseases of the Chest, Victoria Park. Thirteenth edition. Pp. 746, 8vo. Price, 16s. London: H. K. Lewis, 1897.

When a book written by a man of eminence reaches its thirteenth edition criticism is superfluous. To ask medical men to read Ringer is to invite them to do what they have already done. Who is there among those who pride themselves that they take a real interest in therapeutics, who is unfamiliar with this work in some of its editions? But this, the latest, is enriched by the addition of a description of the newest drugs and methods, while a separate chapter has been introduced on Serum Therapeutics. And in connection with the Invalid Dietary there is a short section on the use of the digestive ferments. To select special articles for criticism would be invidious where every chapter is full and complete. To those who have never perused the work we say—read it carefully at the earliest opportunity, and to those who have mastered the previous editions we recommend the further study of this intensely practical and charming work.

THE POCKET FORMULARY FOR THE TREATMENT OF DISEASE IN CHILDREN. By Ludwig Freyberger, M.D. Vienna, M.R.C.P. Lond., M.R.C.S. Eng., Clinical Assistant, Hospital for Sick Children, Great Ormond Street; Curator of the Museum, etc., Great Northern Central Hospital. London: Rebman Publishing Co., Ltd. 1898. Price, 6s. 6d. net.

The object of this little book is stated in the preface to give to the busy practitioner and the senior medical student, in a concise and handy form, all the information which may be required as regards the treatment of diseases of children by drugs. The names of the drugs are arranged in alphabetical order to facilitate reference, and under each drug is a brief account of its properties, use, therapeutics, incompatibles, dose, correction of taste, examples of formulae, etc.

The volume is useful so far as it goes, but many useful drugs are not to be found in their places, e.g., Carbonate of Bismuth.

The little book is valuable to the busy young practitioner who seeks to combine pleasant flavouring ingredients with nauseous drugs in children's prescriptions. It is handy in size, printed in good type, and well-bound.

LEXIQUE-FORMULAIRE DES NOUVEAUTES MEDICALES ET BIOLOGIQUES; NOUVELLES MALADES, NOUVEAUX SYNDROMES, NOUVEAUX REMEDES, NOUVELLES OPERATIONS. Par le Professeur Paul Siefert. Paris: J. B. Baillière et Fils. 1898.

This is a handy pocket book, in dictionary form, consisting of short articles on new diseases, remedies, operations, and the latest treatment. It is up to date and reliable, and should find a ready sale among those who understand the French language. It is one of those excellent little manuals for which the profession is so much indebted to Messrs. Baillière and Sons, the well-known publishers in Paris. The price is only 5 francs.

DR. DE LAMBERT SUBSCRIPTION FUND.

THE friends of Dr. de Lambert will be sorry to hear that he recently had the misfortune to contract a serious attack of septic cellulitis of the hand from a scratch received when opening an abscess. It has, unfortunately, been necessary to remove one of his fingers. As Dr. de Lambert is entirely dependent on his immediate professional earnings, his painful position just now, during his enforced idleness, has suggested to some of his friends that it would be a great help and rest to his mind to know that he was not entirely penniless, hence a subscription list has been opened on his behalf. Intending subscribers are asked to send their contributions to the Editor of the *Australasian Medical Gazette*, 121 Bathurst Street, Sydney.

The following amounts have already been received:—

R. Scot Skirving	£1 1 0
Samuel T. Knaggs	1 1 0

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Buchanan, William, M.B. & Mast. Surg. Univ. Edin. 1896.
Lamb, Robert, M.B. & Mast. Surg. Univ. Edin. 1901.

And for additional registration:—

Newton, Alice Sarah, Mast. Surg. Univ. Sydney, 1898.

NEW ZEALAND.

Williams, William Ernest, M.B. 1896, B.S. 1897, Univ. Melb.

TASMANIA.

Bohrsmann, Gustav Hall, M.B. Syd. 1898.
Leary, William Albert Edward, M.B., B. Ch. Trin. Coll. Dubl., 1893.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

ADAM.—On the 31st May, at 23 Pleasant Street, Ballarat, Vic., the wife of Basil J. Adam, M.B., C.M., of a son.
COOK.—On the 2nd July, at Birregurra, Vic., the wife of Dr. Hy. Cook, of a son.
IREDELL.—On the 24th June, at "Melford," Esplanade, St. Kilda, Vic., the wife of Dr. Chas. Iredell, of a son.
KORTUM.—On the 14th June, at Cooktown, Q., the wife of Dr. H. Kortum, of a son.
MOORE.—On the 31st May, at Alcaston House, Collins Street East, Melbourne, Vic., the wife of Dr. W. Moore, of a daughter.
WILSON.—On the 14th June, at Warren, N.S.W., the wife of Dr. J. H. Wilson, of a daughter.
ZICHY-WOJNARSKI.—On the 16th June, at 230 Victoria Street, North Melbourne, Vic., the wife of V. J. E. Zichy-Wojnarski, M.B., & Ch.B., of a son.

MARRIAGES.

DICKES—CORTIS.—On the 2nd inst., at St. Mark's, Darling Point, Sydney, by the Rev. W. Flower, M.A., Ernest, eldest son of Walter James Dikes, B.A., Peckham Rye, London, to Mary Gertrude, second daughter of Dr. W. R. Cortis, of Cowra, N.S.W.
HALL—DALRYMPLE.—On the 22nd June, at Holy Trinity Church, Erskineville, Sydney, by the father of the bride, G. R. P. Hall, M.B., Ch.M. North Sydney, second son of G. P. Hall, Esq., Blairmore, Aberdeen, to Grace, only daughter of Rev. F. M. Dalrymple.

DEATHS.

DOBBYN.—On the 10th June, at Owens District Hospital, Beechworth, Vic. of pneumonia, William Augustus Dobbyn, M.R.C.S. Eng.
HEFFERNAN.—On the 37th June, at Fitzroy, Vic., Blanche Gillott St. Julian, the youngest daughter of Dr. and Mrs. Heffernan, aged 2 years and 4 months.
LAMROCK.—On the 11th July, at Lauriston, Waverley, N.S.W., Violet Mary, infant daughter of Leslie and Violet Lamrock.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS.

By W. ANSTEY GILES, M.B., C.M. EDIN.,
ADELAIDE, S.A.

READ BEFORE THE SOUTH AUSTRALIAN BRANCH OF
THE BRITISH MEDICAL ASSOCIATION.

GENTLEMEN,

My term of office ends to-day, and before vacating this chair I shall endeavour to give you some account of my stewardship, at the same time tendering to you my grateful thanks for the honour you have done me in electing me your President for the past year, and for the manner in which at all meetings of this Society I have been assisted in the discharge of my duties.

To the members of the Council I heartily acknowledge my indebtedness for active co-operation and advice, and for the uniform harmony and good-fellowship which have characterised all our deliberations. I look back with pleasure upon the work done during the year as being of a most interesting and instructive character, quite up to the high standard established by our predecessors. The meetings have been well attended, with the exception of one in February which fell upon the most trying evening during a heat wave of almost unparalleled severity. The members present showed their wisdom in deciding to leave the precincts of the University without delay, and those who did not attend exercised a wise discretion in staying away. I have long held that the Society might with advantage go into recess for the three mid-summer months, December, January and February, when the weather is so enervating that it must in a measure militate against the success and real enjoyment of our gatherings. I am very pleased to note that a motion to this effect is likely to be tabled, and I trust the majority will vote in favour of such a resolution.

Another source of gratification to me is the regular attendance of so many junior members, and especially do I welcome the graduates of the University of Adelaide—our old pupils. Before very long the conduct of the affairs of the Society will devolve upon their shoulders, and I am glad they are qualifying themselves so well for future responsibility. One of the most thoughtful, suggestive, and interesting papers read during the year emanated from

one of our graduates, who dealt with his subject with much ability, and richly deserved the marks of approval accorded to him.

I have been agreeably surprised by the excellent clinical material supplied during the year, and heartily thank the members who so largely contributed towards the success of our meetings. The staff of the Children's Hospital deserve special recognition and thanks in this respect.

It requires a very short experience in this world to realise the fact that storms will occasionally occur; at times suddenly, or with little warning, on the top of atmospheric conditions unusually peaceful and serene; fortunately rarely, still not by any means unknown, to be followed by a cyclone of a truly terrific character, leaving nothing but ruin and desolation in its wake. For years the Medical Profession worked well and peacefully in this city; the Hospital flourished; improvements were gradually carried out to keep us abreast of modern requirements; a Medical School was founded, which in its short career accomplished wonders, and a most attractive and complete curriculum was offered; the Medical Society was in a thoroughly satisfactory condition, the members worked with enthusiasm, the roll call steadily increased, harmony prevailed. Suddenly, with little warning, the storm burst upon us; the Hospital cyclone carried all before it, and a controversy, quite unnecessary but of an intensely bitter character, raged. At this point some may feel inclined to interject, "For goodness sake, keep off the Hospital topic." This I would gladly do, did it not so vitally affect our Society, and had its evil influences not come so prominently before us during my year of office. This must be my excuse for dealing with a most unsavoury subject, which I detest as heartily as anybody in this room. As a member of the old Board of Management and one of the late honorary surgeons, I feel qualified to speak.

I need hardly remind you that the old Board endeavoured to preserve proper order and discipline among the nurses. The Government declined to support the Board in its endeavour to accomplish this object, and virtually dismissed it. The offending nurses were retained in the Adelaide Hospital, and the ringleader is now Superintendent of the Nursing Staff. The members of the late honorary staff, realising that chaos was likely to result if such a state of things could be tolerated, and sympathising

deeply with the old Board in its efforts to maintain law and order, decided to give a month's notice and then resign in a body. In this action they were supported by almost the whole of the Medical Profession, not only in this colony, but throughout Australia.

All through the Hospital controversy the misunderstandings and misrepresentations have been not only numerous but astonishing, and I may quote a few instances:—

1. In connection with our resignation we were at once charged with gross inhumanity for deserting our posts and leaving the sick and suffering without medical aid. What really did happen? Five resident medical officers remained, who, with the assistance of physicians and surgeons in the Government employ, attended to the wants of the patients; and, as Dr. Russell, late Medical Superintendent, points out in a letter recently published in the *Register*, the services of those gentlemen, who were termed "the volunteers," were not required, so that actually there was more medical assistance available than was needed. Further, I may lay stress upon the fact that the honorary staff expressly notified their willingness to attend to any cases requiring their services until suitable arrangements were made for carrying on the work. So much for the clamour raised about the callousness of the late honorary staff, which after all was founded on fiction rather than fact, but which I regret to believe was received as gospel by a large section of the public. The late honorary staff declared that it could not work in a hospital where the nurses were encouraged by the Government to rebel against their superior officers, and surely its members might be credited with honest opinions and be allowed liberty of action without incurring general obprobrium.

This leads up to the next instance I would give of the misrepresentations referred to:—

2. The action taken by the late honorary staff and the old Board was publicly stated over and over again to be suggested by political considerations. This statement I can deny absolutely. I am certain no member of the late honorary staff took a sufficient amount of interest in politics to induce him to throw up his hospital work (in which we all took pride and pleasure), having in view the direct or indirect discomfiture of the Ministry or any political party. I am positive the man has never been born who could persuade the sixteen medical practitioners constituting the late honorary staff to take such decided and unanimous action, unless most cogent reasons bearing upon their professional future could be advanced.

Then, again, most serious charges have been laid against the old Board. Because the three members of Parliament on the Board happened to be in the Opposition it has been averred that the whole Hospital difficulty arose from their machinations. It is indeed sad to think that such charges could be levelled against men with their reputations for honourable, straightforward conduct, who spared themselves no pains to advance in every way in their power the interests of the Hospital. And, also, it is painful to look back and reflect upon the long weary struggle maintained by the members of the old Board solely to keep their institution up to a proper standard of efficiency, with the object of benefiting that class the representatives of which afterwards held them up to obloquy and derision. Had this object lesson not occurred I could not conceive it possible that the Labour Party, or any other party, could be induced to seriously consider the charges hurled against the old Board, the members of which were unanimous in the stand they took up on the nursing question. Can this accusation commend itself to one's common sense for an instant—that a number of reputable citizens appointed to guard South Australia's most important charity would one and all lend themselves to corruption, tyranny, and the basest subterfuges? Yet many, judging from their private and public utterances, firmly adhere to such sentiments! Though political considerations have not influenced me in Hospital matters, and I have never taken sufficient interest in public affairs to identify myself in an active manner with any party, I will readily allow that the attitude assumed by the present Ministry towards the Medical Profession in South Australia is not calculated to inspire that degree of respect and affection which should readily spring up in the hearts of a people ruled by a truly powerful and beneficent Government.

3. One more example bearing on my text may be quoted. I refer to the cablegram sent by the present Government in reply to interrogatories from the Agent-General as to the reasons for the resignations of the late honorary staff, as inquiries were being made in London by medical men whose attention had been arrested by the appointments advertised. The explanation offered by the Government appeared in the *Register*, of May 27th, 1896, and reads as follows:—

"The difficulty is simply that the honorary staff desire to usurp the functions of the Board and Government, and insist upon the expulsion of a nurse whom there is nothing against, and whom the Board and Government have decided to retain."

Could anything be more calculated to mislead than this reply? Can anybody conversant with the facts characterise such an explanation as being other than most disingenuous, to say the least of it? The members of the late honorary staff made no attempt to usurp the functions of the Government in any way, and their entire sympathies were with the Board under which they held office, and to whose authority they offered most loyal allegiance. I repeat the members of the late honorary staff resigned when they were convinced that Government interference would seriously jeopardize the proper order and discipline among the nurses, so essential (as the veriest tyro must admit) for satisfactory and thorough hospital work.

They declined to give their services under the new régime, forwarded their resignations, and after due notice retired. Many other examples of a similar nature could be cited, but I will desist lest I weary you, for what I have already said will suffice to demonstrate that extraordinary misstatements and misrepresentations have occurred in connection with this much-debated and hackneyed subject.

When Dr. Perks was on the eve of his departure for England, at the request of the Council he readily consented to act as our representative at the meetings of the British Medical Association. Having been one of the chief actors in the Hospital drama, he naturally would have all the details at his finger ends, and at a special Council meeting held a night or two before he sailed he was supplied with all further information that might be of any value. His mission on our behalf was to submit to the authorities of our Society in England a perfectly accurate version of the Hospital disturbance and matters arising out of it. The special meeting of the Executive of the British Medical Association to deal with this matter was to be held a few weeks after Dr. Perks' arrival in England, and we were thoroughly satisfied that our case was in good hands, and that our envoy would employ himself actively in the interests of his medical *confrères* in South Australia. Unfortunately Dr. Perks forgot the date of the meeting, and did not attend.

To Drs. McLeod and Goodall our most cordial thanks are due for their efforts on our behalf, and for their voluminous reports of all that transpired affecting our interests. Were it not for the unselfishness and energy displayed by these gentlemen misunderstandings might still exist at headquarters, and our knowledge

of what transpired would have been most fragmentary and unsatisfactory.

I now come to the action which certain members of our Society thought necessary to take against the individuals on the existing honorary staff of the Adelaide Hospital who happen to be members of this Branch. The Council declined to take the responsibility of recommending a definite course of action, but asked the members to decide for themselves what would be wisest and best. The question was duly discussed, when a resolution was carried that nothing should be done. This did not meet with the approval of certain members, who, in due conformity with our bye-laws, requested the Council to call a special meeting for the purpose of deliberating upon the advisability of expelling those men who had shown by their behaviour strange callousness and indifference to the feelings and wishes of their medical brethren in Australia, or, I might add, in any part of the world where the situation is understood.

Some of the individuals aimed at attended the meeting, and were, doubtless, edified by what they heard, but their arguments were lame and impotent in the extreme, and convinced nobody. Ultimately it was decided that, however desirable it might be, it was not expedient, to adopt any extreme measures, and the gentlemen were afforded every opportunity of satisfying themselves that their presence as members of the Society was most distasteful. After such strong, and almost unanimous, expressions of opinion one might be led to what would appear to be a logical conclusion, that those persons, after receiving such distinct proofs that they would be no longer welcome, would voluntarily retire. Nothing of the sort has occurred; it is still their good pleasure to pay their annual subscriptions.

I deeply regret to have to chronicle, as the outcome of all this, and the retention of these objectionable persons, the decision of some of our active and loyal members, to resign. Resignations were received from seven of our valued supporters; men who, through the troublous times, preferred their professional honour to any doubtful method of procuring personal advantage, and whose attitude was consistent and praiseworthy. One member was persuaded to reconsider his determination, and withdrew his resignation to our great pleasure and satisfaction. The others were adamant.

It is a thousand pities that such should be, and that our brother medicos, whose stern sense of duty determined them to adopt such extreme measures, could not be induced to take a less

decided view of the difficulties of the position. Nevertheless, they have acted throughout with the best motives, and have shown an amount of self-abnegation, and a readiness to sacrifice themselves in the interests of their profession, which all must admire. I can only add that I very sincerely trust happier times are not far ahead, and that we may, in the near future, have the pleasure of re-electing these absent friends to the South Australian Branch of the British Medical Association. May I now hold up two pictures before you, and ask which you think the more worthy of admiration.

One is the meeting of Labour members of Parliament at the Hospital, who, at the invitation of the Chairman of the Board and the Chief Secretary, went to see for themselves that all connected with the medical, surgical, and nursing arrangements was in the most satisfactory condition. After spending some portion of an afternoon in qualifying themselves to judge, they met together in the Board-room, and expressed themselves strongly and emphatically that all was right as right could be, and their reassuring speeches duly appeared in the daily press. Mr. Carpenter, M.P., on this memorable occasion, was responsible for a statement delivered as a most forcible and trenchant argument calculated to set at rest all criticism forever. He stated *inter alia* that "one man told him that he had been in hospitals all over the world, and had never received better treatment anywhere than in the Adelaide Hospital." To a man versed in hospital affairs the mere presence of such a patient would suggest the possibility of some affection hardly calling for admission to the wards, while the testimony from such a one might appear to the sceptic of more value when applied to the quantity and excellence of medical comforts, rather than the qualifications of the staff to discharge their duties or the general condition of the Institution.

The second picture I would ask you to contemplate transfers us to the meeting of the Wesleyan Methodist Conference held in March last in this city, when an official request was received that the members should visit the Hospital for the purpose of ascertaining, at a visit of inspection, that all was well. The conference respectfully requested to be excused.

The Rev. D. S. Wylie, in reply to his invitation from the Chief Secretary, forwarded the following communication, which, to complete my picture, I will give in *extenso* :—

March 10. To the Hon. J. V. O'Loughlin.—Sir,—I have the honour to acknowledge the receipt of your letter of the 9th inst., inviting me to visit the Adelaide Hospital that I may see for myself how it is conducted, and also informing me that you have extended a similar invitation to all the members of the Conference. In

thanking you for your courtesy, I beg respectfully to say in reply that I am decidedly of opinion that such a visit as you suggest would be insufficient to enable any person, or even a Conference, to judge of the manner in which the institution has been, or is being, conducted. That you and Mr. Tucker can bring yourselves to seriously believe that such a visit would be of the slightest practical value is in itself a significant circumstance. To all people still amenable to reason on the subject, it appears to me that the fact that all the leading physicians and surgeons of the city have left the institution, that the Medical School has been destroyed, that experienced nurses one after another have resigned, and that all efforts to get a fair investigation, both in and out of Parliament, have been persistently burked is complete proof of incompetency and gross mismanagement. Thanking you again for your courtesy, I have the honour to be, Sir, your obedient servant,—(Signed) D. S. WYLIE.

I do not expect advantage to accrue from anything I have written, for I know nothing I can say or do will convince those, who have expressed themselves against the action of the medical profession, that they have committed an error of judgment; but I wish to point out fallacies to our friends, and not allow the sympathies of any supporter to be alienated through misapprehensions which could be readily explained away. The old officers of the Hospital, who have been branded by some as dishonest tyrants, only fit for social pariahs, acted in good faith and from conscientious motives. They were willing to make any personal sacrifice necessary, and used every legitimate effort to save the Hospital from serious retrograde changes.

Some say the old Board fought the Government, and were worsted. I maintain that there could be no fight between the Board and the Government, as the former has no power, and the latter completely commands the situation. You might as well speak with bated breath of the war waged between the lion and the lamb. The old Board took strong exception to a certain course of action which it was positive was wrong and harmful, and against which it remonstrated as strongly as it was able. All remonstrances and arguments fell upon deaf ears, and those who possessed the power used it. This does not correspond to my definition of a fight, and the result can hardly be said to reflect much honour and glory upon the so-called victors.

In conclusion, I have only to add my earnest hope that our Society may continue to prosper, that wise counsels will prevail, that in the future we may continue loyal and true to one another as in the past, and that my successor, Dr. Swift, may obtain the degree of profit and satisfaction out of his year of office which, through your kindness and courtesy, it has been my good fortune to enjoy.

FOLIE À DEUX.

By JAMES L. THOMPSON, M.B., CH. M. EDIN.,
MEDICAL OFFICER HOSPITAL FOR INSANE,
ARARAT, VICTORIA; FROM NOTES GATHERED
BY W. BEATTIE SMITH, F.R.C.S. ET
L.R.C.P. EDIN., MEDICAL SUPERINTENDENT.

THAT condition of insanity in which there is a development of similar insane ideas in persons who are thrown much into contact with each other is an interesting one. These persons are generally of the same family, and, as a rule, we find that one is the active agent, inasmuch as in him or her the insane ideas first develop, and afterwards these ideas are received, adopted, and intensified by the others. Various names have been applied to this condition, to describe either the sequence of symptoms, or the manner in which the insane ideas have been transferred, or the number of persons who are affected by the delusional condition.

Folie à deux, the term usually employed, can be accepted as sufficiently satisfactory if one bears in mind that the condition is not limited to two persons, but that three, four, or more may become affected. Other terms employed are folie imposé, communicated insanity, associated insanity, simultaneous insanity, and so on, but these, with the exception of associated insanity, are either too limited, only expressing a phase of the occurrences, or convey to the mind an erroneous impression of the sequence of events. It is useless, however, to apply to any group of clinical cases a name which is too restricted, for it seldom happens that any two agree in all particulars, however close the resemblance in the main may be. In considering the condition of folie à deux one meets with a difficulty in the scattered literature available, and further, a number of cases which at first sight appear to come under this heading, are, after more careful consideration and investigation, found to be wanting in one or other of the three factors which Arnaud considers to be common to all forms of associated insanity. These factors are: (1) a similar predisposition, (2) great and protracted intimacy, (3) a plausibility of the delusional ideas. In the case of Mrs. M., a sister (Mrs. D.), and the mother (Mrs. W.) which is here described, and in which the history has been derived from the asylum records, from information specially and carefully collected from reliable local sources, and from numerous letters written by the persons involved, either to one another or to the Medical Superintendent, it will be seen that all the above-mentioned factors are present,

and it seems such a typical case of folie à deux that it is worthy of record.

The central figure is Mrs. M., in whom the delusions, chiefly persecutory, were most marked. She appears to have been the active agent, for in her absence "the enemies" are said by the mother not to have the power that they had when she was at home. She was admitted 1st September, 1894, was then aged 35 years, and had had 6 children, the youngest 13 months old. The present attack had lasted 7 years, and during that time she had been erratic, uncommunicative, and suspicious, but latterly, as she believed that her friends who had conspired to kill her wished to poison her, and as she had refused food in consequence it was deemed advisable to place her under treatment. Her husband was lazy and improvident, and apparently had treated her badly, and she had suffered a good deal from poverty and privation, which, indeed, were supposed to be the causes of her insanity. The sister, Mrs. D., is eccentric, weak-minded, and emotional, greatly attached to Mrs. M., and firmly believes in her fears and suspicions. Mrs. W., the mother, is also eccentric, has had a hard life owing to the misbehaviour of her husband, who was a drunkard, and had led a roving life as a "cattle doctor" and the vendor of a liniment warranted to cure all ailments. He had cared little for his family, and had permitted them to get along as best they could without assistance from him. Mrs. W. lived with her daughter Mrs. D., and between them and Mrs. M. there was very close family intimacy. Mrs. M. had two other sisters, both highly emotional, nervous women, but they had little communication with the rest of the family, and do not appear to have believed in the delusions of the others.

Before admission Mrs. M. had been suspicious of her neighbours; had believed that her friends had conspired to kill her, and that people whom she called enemies were in league against her to injure her. After admission she speedily became suspicious of all around her, doctors, attendants, patients, as being emissaries of her enemies; and while holding to her former delusions, which will be found expressed in the letters of her mother and sister, she speedily developed fresh ones, and these were communicated by letter to her mother and sister, who at once adopted them, and were thoroughly convinced of their truth and plausibility. The nature of these delusions can best be made clear by giving extracts from her letters. To the Medical Superintendent she wrote lengthy epistles whenever opportunity offered, and on whatever scrap of paper she could secure, and

the following are but a few of the many painful delusions with which she was afflicted :—

Much pain was caused by injections or injuries last two nights. The sago or milk given me the last three nights has been tampered with, and I think that opium must have been used by the after effects—sleeplessness and headache—the brain was very much excited, never was so before. I must inform you that last time my changes were upon me they only lasted for a day, being ruthlessly stopped by what I believe to be a laceration of the neck of the womb which, through the inhuman treatment I have hitherto received, has become obdurate and rigid. . . . Miss C (an attendant) keeps very close company with her (a patient), and I find that when she waits upon me I generally get severe pain in stomach, and she also showers me with drugs. . . . P., E., and F. (three patients) spy continually on me, and help to annoy me, and make me ill by this chemistry. . . . After night attendants left I awakened feeling an intolerable pain in the lower portion of my back, as if the backbone had been tampered with. . . . If the treatment is such as I believe it to be, you must know the probable result—paralysis or madness. . . . I must also state that there is some irritant frequently forced down my throat at night in my sleep. . . . I think you will find a solution of this difficulty in Mrs. B.'s anxiety in regard to the accommodation for the night. My candid opinion is that she is only interested in secreting dangerous agents to be found and used later in the night by an accomplice. I tell you again my room is entered twice during the night for their fell purposes. . . . My ears are tampered with. . . . Nicotine is freely strewn over my clothes and bedding, and the constant breathing in of this poison and sulphuric acid, leaves me in a very sorry state. . . . It is nothing short of crime to leave me to the tender mercies of these demons. . . . I feel impelled to write to you that my monthly courses are stopped. The reason for this I cannot give. I fear the worst. My mother's instinct tells me this. I beg of you not to destroy the infant life, but release me. With God's help I can bear the shame and degradation of it all. . . . My enemies are fiends at heart I know, but I hardly gave them credit for such baseness as to molest in this manner a sleeping woman. . . . Do you not think it cruel sarcasm to keep me here to endure these indignities and then to assume that I am mad. . . . Something not too sweet is blown into my nose which inflames that and affects the brain at the same time. I have almost continual pain in the stomach through chemicals strewn over me by patients in this very cottage. . . . My throat was rendered very sore yesterday by the use of quicklime or some such thing, being prepared for the filth . . . so you see all this by-play was premeditated. Often the injections are of acid and something smelling very like gutta serena. This is also thrust down my throat, and is intended to produce this most distressing costiveness. . . . In some cases I get my bread and butter given me with phosphorus and other drugs upon it. . . . Some woman at my cell door after the bell rings in the morning, and when the patients are astir showers these chemicals in.

Believing fully in the above delusions, her life was miserable. She suspected almost everybody, and could not be got to mix with others. She imagined that her food was tampered with, and so it was difficult to get her to

take sufficient nourishment. The slightest symptom of illness was distorted out of all proportion, and was made to furnish proof of the machinations of her enemies. Her sleep was disturbed by unpleasant dreams, and she was hardly ever free from mental unrest and anxiety. The following extract from a letter to her sister, Mrs. D., will give an idea of the terrifying nature of her dreams :—

I had a dream about this woman. . . . I thought she was walking a parapet which enclosed a castle, and on part of it I was lying with baby. She was very near stealing softly to kill us. . . . I hastily retreated, and she followed in great haste. . . . I arrived at a friend's house. She made herself invisible. . . . This friend could or would not help me. . . . I observed father giving chase (clever at the work always). I got away from him, and met Pat (her husband). They wished him to give me another run for it, but he declined, snatched the baby from me, and was doubling it in two, intending to break its back when I grasped it, and . . . ran away. He thereupon invited his mother and sister to give chase. . . . Always Pat—a second rendering of Lady Macbeth's husband—"The cat loves fish, but fears to wet its paws."

Besides relating her dreams, Mrs. M. in her letters describes persecutions such as have been set forth in the letters to the Medical Superintendent. Mrs. M. remained in the asylum for over two years, and during that time showed no mental improvement. On 7th November, 1896, she was allowed on probation with her father, and since then the probationary period has been extended. Judging, however, by letters which she has written to another patient, B.D., who was influenced in her delusions by Mrs. M., the latter has not improved since her return home. A fortnight after leaving the asylum she writes :—

My foes seem furious and determined that I shall again be placed in durance vile, and that I will have been rendered fit by friends? It is a comfort to know "Man proposes, God disposes."

Her last letter to B.D., dated 19th September, 1897, contains the following passages :—

I am at liberty (?) but things are much the same as at the asylum. Talk of people being possessed by Satan, I think all mine are. . . . I find two discrepancies in your letter in regard to mine which fosters the belief that the one you received was not written by me. . . .

We have seen that Mrs. W. (the mother) was always regarded as eccentric, and we find that she had openly, and to many persons, expressed her fears and suspicions, and her actions were those of a person who believed firmly in her delusions. She feared that persons whom she termed "enemies" were trying to injure her health, or perhaps poison her by throwing chemicals over the vegetables in her garden, but who those persons were, or what motive

they had for acting as they did, she could not say. In order to test the matter, she sent some leaves from her garden to Mr. Blackett for analysis, and wrote to him as follows: "Would you be good enough to let me know if there is anything dangerous on these leaves? There is often some stuff thrown over my garden. When the stuff is put on the root it kills it and withers all the leaves. The leaves wither by degrees when that stuff or powder is put on them. It is done by some enemies. I cannot understand it, but I can see plain there is something wrong." Mr. Blackett answered that he had found caustic lime, and perhaps urine on the leaves, and this fully convinced Mrs. W. of the truth of her suspicions, though the most probable explanation of the matter was that the plants had been damaged by urine carelessly thrown upon them by Mrs. W. herself, or by some other member of the household. As to her daughter's condition, she was quite confident that Mrs. M. was not insane, nor ever had been; that her confinement in the asylum was due to the persecution of her enemies, and that her (Mrs. M.'s) husband and others had tried to poison her by means of poisonous fumes and injections. She wrote as follows to the Medical Superintendent:—

In reference to Mrs. M. she needs some kind friend to protect her. . . . You wrote of her receiving her husband strangely. I am surprised that he had such assurance to even pollute her with his presence. . . . My daughter's enemies have money plentiful at their disposal, and would pay anybody that would willingly do their work to gain their ends, for they would rather see her dead than come out well. . . . Her writing to her sister in the strain she does—they understand one another—and can sympathise with each other, her sister knowing a lot of her trouble and persecutions.

The last paragraph is interesting as indicating that Mrs. W. knew of the close relations between her daughters, and that she believed in their statements, and sympathised with them in their afflictions. This is made clear in her letter to her daughter, Mrs. M.:—

I am sorry, dear Ellen, that your enemies are still troubling you. They have left us alone lately; they cannot come into our house, and we have nothing much in our garden to spoil yet. . . . When we have anything fit for use we will suffer again if they are not checked. Your sister Mary (Mrs. D.) suffers much from them, but they did not have the power that they had when you were out.

The third member of the family involved was Mrs. D., an elder and favourite sister. She and Mrs. M. had always been much together, and they had as a further bond of union their unhappy domestic ties, with the resulting poverty and distress. Mrs. D. had taken a strong dislike to her father and her sister's

husband, and she believed that they had conspired together to poison Mrs. M., and as they had failed in the attempt they influenced the doctors to certify to her insanity, although she (Mrs. D.) was quite certain her sister never was insane. She had complained to the police of attempts to poison vegetables growing in her garden, and, although she stated that she knew the guilty parties, she refused to disclose their names, as they had money, and would probably put her in gaol if she did not prove her words. She was much upset by the enforced separation from her sister, to whom she was strongly attached. Her delusions became stronger, and she took steps to gain redress by applying for assistance to the police. To them she stated:—

I think it my duty to give what information I can to get ourselves protected, for we are in great danger while our enemies are at large. . . . It is an easy thing for anyone when on our roof to put any horrid fume or suffocating dust, or even dung, through (i.e., through the roof). When we are fast asleep we must be inhaling these horrible smells and fumes. . . . I think it very injurious to eat anything from our garden while their destroying hand is able to touch our vegetables.

She wrote to the Medical Superintendent asking him to watch carefully over the sister, who was quite sane, but who might be injured by her enemies.

I hope you will study Mrs. M. carefully, and not laugh at her fears and call them delusions, instead of what they really are—truths. . . . She said her father, with others, was poisoning her, which any wise man or woman knows it is possible for villains to do when they have a great deal to gain or hide by it.

She writes to Mrs. M. condoling with her, and affirming that both her mother and herself are similarly afflicted:—

What you suffer is a repetition of what we are all getting; as for filth and other fumes at night, it is horrible. . . . You must pray for mother; she is in more danger than any of us. . . . The doctor knows that you are not mad, and that it is a grievous worry to keep you there. . . . Do not be afraid on my account; I am not. God and His holy angels and saints are watching over His persecuted ones.

From

"THE BENGAL TIGRESS."

As bearing on the theory that Mrs. M. was the "active" agent, and that the mother and sister were "passive" agents, it is interesting to glance at the influence which Mrs. M. had over the patient B.D. previously mentioned. B.D. was first admitted to Ararat on 21st September, 1894, suffering from melancholia with delusions about seeing visions of good angels, and that she wants to die for the faith. She is beyond the average intelligence, and is very reticent and circumspect. She had an attack of typhoid fever shortly after admission;

and her mental health improved so rapidly after her recovery from typhoid that she was discharged within three months of her admission. A relapse, however, took place, and she was readmitted on 7th March, 1895, in a state of great depression, and with delusions of a religious nature. She was given to the writing of poetry, and the following copy of one of her productions serves to illustrate her mental condition at that time:—

SYMPATHY.

* * * * *

I saw her day by day draw near
The gate that's never open,
And vainly seeking a friend more dear,
For heart seems nearly broken.
By the blue and waving gums
She seeks the friend that never comes.

Shortly afterwards she became very intimate with Mrs. M., and, although in different wards, they were inseparable in the sewing-room. Soon B.D. began to manifest suspicions of other patients and attendants. She believed in and sympathised with Mrs. M., and her own delusions assumed a persecutory form. Now that Mrs. M.'s influence has been removed, B.D. is becoming doubtful of some of her former beliefs, and is inclined to make little of those suspicions of Mrs. M. which she formerly concurred in.

As bearing on the causation of folie à deux, it is interesting to note that there were several points in the history and in the mental condition of Mrs. M. and B.D. which bore striking resemblance. They were both nervous and emotional, touchy and easily offended, possessing vivid imaginations with a poetic strain. They had both had uncongenial family associations, and in the asylum, whilst keeping apart from other patients, they seemed mutually attracted to each other.

A striking case is recorded by Dr. Woods where five members of a family came under his care at the one time. They had been associated in the killing of another of the family, an epileptic idiot,* who, according to the mother's statement, was a bad fairy, and not her son at all.

They all laboured under delusions of a persecutory nature, and were afraid lest they should suffer demoniac possession. Their family history was a bad one, and their surroundings were such as to foster the growth of ignorant superstitions.

This case calls to mind the actors in what was called the "Coburg Tragedy" of ten years

ago. There a mother and three daughters combined to kill each other whilst under the influence of delusions of a religious nature. The youngest daughter was bled to death, and attempts were made to kill the eldest and second daughters, but by this time the killing impulse had become exhausted, and they escaped. The eldest daughter was shortly afterwards admitted to Yarra Bend, and she was stated on admission to be suicidal, dangerous and destructive, and in weak bodily health. She was acutely depressed, and stated that she was even too bad to try to improve. After a long period, about three years, during which mental unrest and self analysis continued, she was reported as being "better." In three months' time from that she had an acute attack, during which she was excited, hysterical, crying, and depressed. She said that she thought "God was the devil, &c," and was much concerned about the state of the soul. At present, after a lapse of over six years, she still remains at Yarra Bend, and is quiet, works industriously at sewing, and is at times quite cheerful, but never very communicative.

The younger sister recovered from her attack at the time of the tragedy, and remained well for about nine years, when she too was admitted to Yarra Bend. Her condition very shortly became unsatisfactory, and six months after admission she was reported to be getting quite demented.

An elder brother, on visiting home on the occasion of the tragedy, and not knowing that anything had happened, became very emotional, and on the following day was acutely maniacal, and had to be committed to Yarra Bend. On admission there he was sullen and restless. He explained his restlessness by saying that people were using their influence over him to deprive him of his will power. Violent and refractory, he refused all food, being afraid that it had been poisoned. Stood up in his cell all night, and refused to speak. All smells, tastes, and sounds annoyed him. He believed that people must pass through a similar stage to the one he was in. He improved slowly, and two months after admission was allowed out on trial leave. That there was an hereditary instability in this family is shown by the fact that the mother had a sister who died insane. In the case of the mother and daughters, their attack came on suddenly—the delusions were of a similar nature, and believed in by them. There was a similar predisposition, and there was the long and protracted intimacy of family life, thus satisfying the conditions suggested by Arnaud.

OBSERVATIONS AND NOTES ON
WIDAL'S REACTION.

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Now that Widal's Test has assumed such an important position in the diagnosis of typhoid fever, the following notes upon a few of the cases which have been treated in the wards of the Sydney Hospital may be of some interest.

The test has proved of even more value from a *negative* than from a *positive* point of view. It is not in the *prima facie* case of enteric that the physician asks for the application of the test, but rather in the case of doubtful diagnosis, where the negative Widal reaction directs him to make fresh efforts to ascertain the cause of the patient's continued high temperature and other symptoms. This point is well illustrated by some of the following cases:—

A. C., aged 25, admitted on the tenth day of her illness, complaining of headache, anorexia, and feverishness. A private practitioner, who had seen the patient on several occasions previous to admission, had diagnosed the case as probably one of typhoid, and in the absence of positive signs, the only point against such a diagnosis was the somewhat rapid, though not actually acute, onset of the illness. There was a very strong hereditary tubercular history, but nothing abnormal could be detected in the lungs. The temperature averaged from 101° to 103°·6. The spleen was not enlarged, and there was no abdominal distension, pain, or tumour. On the eleventh day of the illness Widal's test gave a negative result. This practically eliminated the *pro tem* diagnosis of typhoid, and compelled one to try and solve the problem without invoking the aid of the typhoid bacillus. On the twenty-fourth day of the illness the Widal again gave a negative reaction, the diagnosis was still unsolved, the temperature still high, and now somewhat hectic. A few days later a little pus was found in the urine, and this, together with pain in the left loin, suggested a pyonephrosis, which diagnosis was subsequently confirmed by operation. The patient made a complete recovery. Though the abscess was supposed to be tubercular, no tubercle bacilli were found in the urine.

In this case the negative Widal reaction drove the physician from the cover of a false

diagnosis into the open, where he was compelled to seek for the real cause, and discovered it when he found a small amount of pus in the urine.

The advantage of a negative Widal reaction was also seen in the case of a man 36 years of age, who was admitted with a history of general malaise, headache, anorexia, and pain in the back. He had been ill for a couple of weeks, had a temperature of 103°, and slight tenderness in the right iliac region. In short, the patient gave a history not unlike enteric, and although he had no definite symptom of enteric, yet it was much easier to accept the diagnosis of typhoid than to seek for another of which there was no special indication.

The diagnosis of typhoid was again eliminated by a negative reaction, and still it was found impossible to detect what was the cause of the patient's illness, until, after careful examination, the liver dulness was found to be somewhat increased, and the presence of a hepatic abscess was indicated. The history of the case is an unfortunate one, for the patient subsequently died, and at the post-mortem examination there was evidence of an old primary appendicitis with a secondary abscess deep in the substance of the liver. There were no typhoid lesions.

It is in cases like this, and the one first mentioned, that much can be done for the patient by operation, but that operation must, as a rule, be done early, which means early diagnosis, and the early recognition that the case is *not* one of typhoid.

The test has proved of value in quite a variety of other cases, *e.g.*:—

J. H., a Chinaman, had been ill for three or four weeks with pain in the abdomen and legs. He spoke English so imperfectly that very little history was obtainable. He looked very ill, the temperature was 103°, and the pulse small and rapid. The spleen was not enlarged. The Widal test gave a negative result, and the subsequent course of the case showed it to be one of beri-beri in an acute stage.

Another case of more than ordinary interest occurred in a sailor who gave a history of repeated attacks of malaria, and who was admitted in a malarial paroxysm. After admission the temperature fell to normal, and remained so for five days. It then began to rise gradually, and on the third day had reached 104°. The temperature did not fall to normal immediately, but took a couple of weeks to do so, and on the application of the Widal test a positive result was obtained. The patient had a mild attack of enteric fever, but

so mild and with so little constitutional disturbance that, but for the Widal reaction, the whole attack might have been overlooked. He had a good appetite, felt quite well, and was anxious to get out of bed. Had he been following his occupation at sea he would have been a source of infection to his shipmates, and even in a hospital ward, with the case undiagnosed, and the excreta not disinfected, the patient might have been the means of starting an outbreak of enteric.

In this patient the presence of malaria appeared in no way to affect the positive value of the test. On the other hand, the value of a negative reaction was proved to be equally good in the blood of a patient in whom the malarial parasite had been found on several occasions.

In only one case out of eighty was any doubt thrown upon the accuracy of the Widal test. This occurred in an intelligent patient, who gave a concise history of headache and weariness for the past ten days. Although not well enough to follow his occupation, still he had not been confined to bed except for a day or two before admission, and had been only induced to do so by his sister, who was a nurse, and half suspected that her brother was suffering from typhoid. The tongue was coated with a yellowish-white fur, and after admission a roseola rash, like that of enteric appeared on the chest and abdomen. The spleen could not be felt, neither was its area of dulness increased. On admission the temperature was 102°·2, and that was the maximum recorded. The morning temperature fell to normal on the fourteenth day of the illness, and the evening temperature a couple of days later. The bowels were constipated.

Clinically, the case appeared to be one of typhoid, and the diagnosis would have been accepted without a doubt, but the blood did not give a positive Widal reaction. There was no sign of clumping amongst the bacilli, neither was there any loss of motility. The test was applied on the twelfth day of the illness, and again early in convalescence, at both of which times one might have expected a positive result.

Could the case have been a somewhat atypical one of influenza, of which there was an epidemic at that time; or was it really a case of typhoid in which the bacilli could make little or no headway in the lymphoid tissue of the bowel, not even sufficient to alter in any way the character of the blood; or can it be that "abortive typhoid" is not always due to the specific bacillus of enteric but to some other organism?

In a large number of the cases examined by the Widal reaction the opportunity was taken

of testing the comparative value of the Ehrlich diazo reaction of the urine. This in all well-marked cases of typhoid is readily obtained, but, unfortunately for its diagnostic value, the same result is at times noticed in the urine of patients suffering from acute diseases other than typhoid fever. Some writers have shown that the diazo reaction is found in almost all cases of measles and typhoid, not infrequently in acute miliary tuberculosis and puerperal septicæmia, rarely in pneumonia, erysipelas, diphtheria, and scarlet fever.

The comparative value of the two tests, and the advantage of the one over the other, was well illustrated by a patient suffering from acute phthisis with tubercular affection of the bowels, and also by a case of general tuberculosis, which had been diagnosed clinically as typhoid. In both of these instances the Widal gave a negative result, whilst the diazo gave a positive. From the typhoid cases examined, it was impossible to form any very accurate idea as to what was the earliest day of the illness on which either of these two tests first gave a positive result, although in the large majority of cases they both reacted positively by the end of the first week. In one undoubted case of typhoid the Widal gave a negative result on the seventh day of illness, and then a fairly well marked positive result on the ninth day. In another instance it failed to react in what was thought to be the latter half of the second week of illness, and then gave a positive result a day or two later. But both of these appeared to be the exceptions to prove the rule.

During the later stages of typhoid, when the morning temperature had fallen to normal, and sometimes even before it had come down to 100°, the diazo reaction almost always failed; whilst the Widal, as a rule, gave as strong, if not a stronger reaction than during the height of the fever.

In some cases of enteric the agglutinating power of the blood was tested at frequent intervals, and some interesting results obtained. As a general rule the intensity of the Widal reaction appeared to be no accurate gauge of the severity of the attack. In one patient a relapse increased the agglutinating power very much, and even five weeks after the temperature had fallen to normal, the reaction was more marked than it was even at the height of the first attack.

As many previous observers have noted, the blood in some instances retains its agglutinating power for months and even years after the

attack of enteric. The importance of this is evident, for a positive Widal reaction might lead one to suppose that a patient may be suffering from typhoid, whilst in reality the cause is something very different, although Eberth's bacillus had stamped his trade mark on the patient's blood and there it had remained ever since. And so in all cases examined it is necessary to inquire concerning the presence or absence of a history of typhoid. The fact that the patient has had typhoid at some previous date is no reason why the test should not be applied, for it is possible that the blood has lost its agglutinating power, and the negative reaction, if obtained, may be all that is necessary to settle the diagnosis. Under these circumstances the positive result would be of greatly lessened value, whilst the negative would still carry its full weight; and it is in these negative cases, as has been already pointed out, that the test is of the greater value.

Although the reaction of the blood is, as a rule, retained for a long time, yet in some cases it appears to be lost quite early, in a few months or even weeks. For example, R. C., a sailor, had an ordinary attack of enteric; the blood reacted readily at the commencement of convalescence, but twenty-five days later the reaction was a comparatively poor one, and on the fifteenth day after the evening temperature had fallen to normal there was no reaction at all. In another case the reaction was lost on the twenty-first day of normal temperature. Such cases as these help to explain how it was that a negative result was obtained from the cerebro-spinal fluid of a man who died of acute arsenical poisoning, and in whose ileum were found the remains of comparatively recent enteric ulcers. How many weeks or months since the bowel had been ulcerated it was hard to determine, especially as but an incomplete history could be obtained of the patients' previous health. Culture preparations from the spleen did not yield any typhoid colonies, and so probably he had lost not only all the bacilli themselves, but also all agglutinating power in the blood. (The fact that the test was applied after death probably did not interfere with the value of the test, for in several fatal cases of enteric the reaction was readily obtained).

These non-agglutinating bloods of convalescents are, if anything, the exception rather than the rule.

In many cases the blood was found to retain its agglutinating powers for months, and even years. Cases which had typhoid nine months, two years, five years, and six years previously

all gave well-marked positive results. Others who had had enteric ten years and thirty years before gave negative results.

Of the eighty cases tested the correctness of the Widal reaction has been confirmed by post-mortem examination in fifteen instances. These were cases of pyæmia, phthisis and tubercular appendicitis, empyema, phthisis with tubercular ulceration of bowel, enteric, acute rheumatism, general tuberculosis, abscess of liver with appendicitis, acute miliary tuberculosis, tubercular meningitis, suppurative appendicitis, septic meningitis after middle ear disease, pneumonia, and septic basal meningitis.

In conclusion, we would add that less difficulty has been experienced in the application of the test than in maintaining the activity of the typhoid cultures, especially during that season of the year when typhoid spleens are not readily obtained. The vitality was best retained by cultures on alkaline or neutral gelatine or glucose gelatine or serum. Sometimes the original growth on the gelatine plates was found to give more active cultures in bouillon than growths which had been frequently subcultured; repeated subculturing in some instances rendered the growth useless.

Some observers report that bouillon cultures over twenty-four hours tend to clump of themselves, and so should not be used; but this appears to depend less on the age of the culture than on some quality of the bouillon. A typhoid culture in some varieties of bouillon shows no sign of spontaneous clumping even after several weeks.

Results from the reaction of dead bacilli have so far proved variable. Those killed by a temperature of 80° have shown no sign of clumping either spontaneously or with typhoid blood, whilst those exposed to a temperature of 60° for ten minutes have clumped remarkably well with typhoid serum, though they did not clump spontaneously.

In the application of these tests the dilution, in all cases, was 1 to 10, and the time limit was thirty minutes, although usually a positive reaction is obtainable in ten minutes or even less.

We are indebted to Dr. Jamieson, the Honorary Pathologist of the hospital, for permission to publish the pathological and bacteriological reports, and to the other Honoraries in whose wards the above cases were treated.

AS DOCTOR'S GROOM AND COACHMAN.—A young man, capable of managing horses, requires situation in Sydney. Inquiries may be addressed, Rev. Geo. H. Allnutt, The Rectory, Cobbitty, N.S.W.

THE USE AND ABUSE OF NARCOTICS, HYPNOTICS, AND ANALGESICS.

By R. L. FAITHFULL, M.D., SYDNEY.

Opium and Salts of Morphia, Chloral Hydrate, Croton Chloral Hydrate, Cannabis Indica, Belladonna, Hyoscyamus, Stramonium, Duboisia and their alkaloids, Piscidia Erythrina, Bromides, Paraldehyde, Sulphonal, Trional, Tetronal, Chloralamid, Cannabin Tannas, Antipyrin, Acetanilide, Phenacetine, etc.

All the drugs in the list enumerated, except Antipyrin, Acetanilide, Phenacetine, etc., and probably the Bromides, produce stupor if the dose be increased beyond a certain point.

Opium, Salts of Morphia, Chloral Hydrate, Piscidia Erythrina, Sulphonal, etc., produce direct sleep; Bromide of Potassium, Bromide of Sodium, Bromide of Ammonium, Bromide of Lithium, Cannabis Indica, etc., produce drowsiness, and under certain conditions sleep.

Others which allay pain may be termed Anodynes, but in large doses produce delirium, rather than sleep. Sleeplessness may arise from different states of the brain, and, therefore, some of these remedies may prove useful at one time, others at another. For instance, Digitalis sometimes produces sleep from its influence on the circulation.

Narcotics are substances which have the property of stupefying, and are used in medicine as soothing agents to produce sleep (Soporifics) to allay pain and diminish spasm (Anodynes), and, acting upon the brain and spinal cord, they tend therefore to lessen intelligence, sensation and motion.

Narcotics, as a general rule, in small doses stimulate, while in larger doses they act as sedatives. After a full dose the first action is a more or less confusion of ideas, a general disinclination to move, a dulness of sensibility, followed by sleep, somewhat analogous to natural sleep, only the individual is a deal harder to rouse, in fact, cannot be so fully aroused. If the dose has been a lethal one, he passes from sleep to coma, from coma to carus, and carus to death.

(Anæsthetics in reality are narcotics of a more rapid, more profound, and more transient action.)

All narcotics act on the centres and the nerve conductors so as to lessen pain, and this property is what recommends them especially.

The special intermediate effects of narcotics are multitudinous, which clearly show that certain agents have the power of stupefying one

part of the nervous system, and increasing that of another. Thus, while the poisonous *Solanaceæ* produce dilatation of the pupil, Calabar Bean produces contraction. Opium paralyses the muscular layer of the intestines.

Belladonna and Stramonium, etc., seem to increase the peristaltic action, probably acting upon the unstriated muscular fibres of the intestines. The *Solanaceæ* provoke noisy and busy delirium, with considerable muscular agitation. The *Papaveraceæ* exert a quieting influence, inducing a dreamy condition, which gradually passes into sleep, in a greater or lesser period of time, according to the dose and to the idiosyncrasies of the patient.

The choice of narcotics is therefore one of much importance, and in using them we should endeavour to select the agent which acts most directly upon the part of the nervous system we wish to narcotise. For instance, if we wish to relax the sphincters, etc., we turn to the *Solanaceæ*. If we wish to allay the movements of the intestinal muscles, lessen the intestinal secretions, moderate the flow of urine or bile, Opium is to be preferred.

In prescribing narcotics it is well to bear in mind peculiar individual idiosyncrasies.

One cannot take the smallest dose of Opium without producing the most distressing vomiting, etc. Another is made delirious with the least dose of Belladonna. A third is quieted by some preparation containing Cyanogen, when other narcotics have entirely failed.

The part played by pain in diseases is far more important than many pathologists think. By itself the element of pain is a potent cause of disease, in combating and destroying this element we often put a stop to the gravest troubles. To quiet pain is frequently the first indication, and to do this effectually, narcotics, anodynes, or analgesics are often absolutely necessary.

There are various methods of using narcotics:—(1) Enepidermatically, (2) Epidermatically, (3) Endermatically, (4) Hypodermatically, (5) By the Mouth, (6) By Suppositories, (7) By Enemata.

Enepidermatically.—The narcotic is placed in direct contact with the nerves of the part, numbing or extinguishing their sensibility.

Epidermatically.—The narcotic is applied to the skin, and friction being employed, absorption is promoted by forcing the medicament between the cells or the epidermic layer.

Endermatically.—The epidermis is removed by various means. The medicinal agent in a finely powdered state is sprinkled over the raw surface, and to a more or less extent absorbed.

Hypodermatically.—The medicine employed for Hypodermatic use should be capable of perfect solution in the menstruum, which is usually distilled or pure water, by this method the medicine is applied under the skin to the subcutaneous areolar tissue.

By the Mouth.—In solution, pill, powder, infusion, etc.

By means of Suppositories.

By Enemata.—I may here mention that the Salts of Morphia, Atropia and Strychnia in solution are absorbed as quickly, and the last named more quickly by the rectum than the stomach.

PRACTICAL USES OF OPIUM OR MORPHIA.

Opium usually relieves pain whether it be what is called merely functional, or such as depends on inflammation, or the result of wounds, or pain due to destructive organic processes, cancer for instance, by its soothing effect upon the brain causing it to be less capable of perceiving painful impressions, although the disease itself may still be progressing.

As a local application for pain, Opium or Morphine is often exceedingly useful, although frequently inferior to Aconite or Belladonna and some other drugs, Cocaine for instance. The effect of Opium in allaying irritation, and hypersecretion of mucous membranes is often remarkable. It is necessary, however, to remember that it should only be used in the early stages of catarrhal irritation of the mucous membranes. Again, it is particularly useful in stopping the reflex mechanism of cough in phthisis, when the cough is a distressing, hacking, and useless one, excited by the presence of masses of diseased lung tissue, which are the cause of irritation, and which cannot be got rid of. Piscidia Erythrina or Codeina also very efficacious in such cases when Opium cannot be used.

Opium, or one of its derivatives, frequently arrests the various form of nausea and vomiting, whether stomachal or reflex, viz., the vomiting of pregnancy, sea sickness, the vomiting which accompanies the passage of renal or biliary calculi.

In peritonitis, whether puerperal, traumatic, or due to inflammatory extension from neighbouring organs or tissues, the valuable effects of Opium, or one of its preparations, is well established; also in arachnitis, pachymeningitis, basilar meningitis, or cerebro-spinal meningitis. Clinical facts tend to show that Opium or Morphine frequently accomplish more than any other remedy. The quantity of Opium necessary varies in each case, but enough should be administered to relieve rigidity and spasm.

Dr. Loomis, of New York, has demonstrated the remarkable fact, that Morphine Hypodermatically is a most important agent in the cure

of uræmic convulsions, puerperal or non-puerperal. Scanzoni first used this remedy in puerperal convulsions, and spoke highly in its favour, but Loomis has called attention to the fact that Morphine administered hypodermatically, first tends to arrest muscular spasms by counteracting the effect of the uræmic poison on the nerve centres; second, by establishing profuse diaphoresis; third, by facilitating the action of cathartics and diuretics, especially the diuretic action of digitalis. Death in coma has, however, shortly followed the exhibition of this remedy in several of the above cases.

In the various forms of neuralgias, Morphine injected hypodermatically, especially if in close proximity to the affected nerve or nerves, frequently affords instantaneous relief, which proves curative in a certain proportion of cases.

In surgical practice, before the administration of Chloroform, Morphine is frequently injected hypodermatically to lessen the paralyzing effects of Chloroform on the cardiac and respiratory centres, and to diminish the subsequent shock due to the administration of the anæsthetic, and to the performance of the surgical operation. It also is said to have the following advantages: 1. Of lessening the stage of spasm and rigidity. 2. Of reducing the quantity of anæsthetic required to a minimum. 3. Of prolonging the stage of insensibility. When thus used, the hypodermatic injection of Morphine should be small, say from $\frac{1}{4}$ to $\frac{1}{2}$ of a grain, it should also be administered 40 to 60 minutes before beginning the inhalation of Chloroform. If given later than this, it is most likely to cause nausea and vomiting during the inhalation of the anæsthetic.

As an hypnotic, with the exception of Chloral, Opium is the most reliable drug.

In fevers, whether inflammatory or specific, sleeplessness that quickly wears out the strength of the patient is a most dangerous symptom, and with it may be noisy and furious delirium, wandering or muttering, picking of the bed clothes, twitching of the muscles, etc., here Opium (with or without brandy, or some other stimulant), in small doses or combined with antimony, may be the means of saving an otherwise hopeless life.

In acute mania where prolonged wakefulness, great excitement, destructive and suicidal tendencies, with persistent refusal of food, drink or medicine are present, Morphine injections act more promptly, and are productive of the greatest benefits. The dose should be gauged by the arterial tension. If arterial tension is low, the dose should be small.

If arterial tension high, with quick pulse, a full dose is necessary.

In melancholia, small stimulant doses are highly beneficial.

CASES IN WHICH IT IS INADVISABLE OR DANGEROUS TO USE OPIUM OR MORPHINE.

Young children usually bear Opium very badly, and to them only the weaker liquid preparations should be given, if at all.

The active principle of Opium passes out with the milk, so it is well to avoid, if possible, giving Opium to nursing women, for fear of dangerously affecting the child.

As a rule, Opium and its preparations do harm in all gastro-intestinal maladies, in which there is a deficiency in the proper secretion, or a suspension of the function of the liver or kidneys.

Opium should not be given shortly before or after a meal, as it lessens the secretion and movements of the stomach, and thus hinders digestion.

Opium is contra-indicated in vomiting of cerebral origin; also that produced by uræmia or cirrhosis. It is well to avoid its use in fully developed bronchitis when the secretions are copious and the expulsive power feeble.

Chronic insomnia, independent of any very notable disease, should not be treated with Opium, if possible, for the opiate soon loses its influence and must be gradually increased to produce hypnotic effects, and there is great danger of producing the Opium habit.

Opium in lethal doses dilates the arterioles and veins. Belladonna contracts them, and, by energizing the cardiac movements, substitutes an active for a passive congestion. It cannot be too strongly insisted on, in this connection, that Belladonna in too great a quantity, or its action too long continued, exhausts the irritability of the unstriped muscular fibre, and thus produces the very state which its administration is intended to relieve.

The state of the pupil, the action of the heart, and the condition of the reflex movements, are the guides to the administration of Belladonna in cases of Opium Narcosis.

The smallest quantity of Belladonna which will dilate the pupil, raise the tension of the arterial system, deepen the respiration, and re-establish the reflex irritability should be used.

It is a fatal error to attempt to restore a patient in Opium Narcosis, to complete consciousness, by repeated doses of Belladonna or Atropine. The action of these agents combined is to produce profound stupor, and this is not a condition of danger so long as the pulse, respiration, and reflex movements are in good condition.

NOTES ON A CASE OF CARBOLIC ACID POISONING—RECOVERY.

By W. A. FLEMING, M.B., C.M. EDIN.,
BALCLUTHA, N.Z.

J. T., FARMER, aged 63. Melancholic for some time. At 7 a.m. on June 13th went out to his stable, saying he was going to feed his horses. He returned in half an hour and remarked, "I've done it all right this time, I've taken some carbolic acid;" and commenced to take his breakfast. After taking two or three spoonfuls of porridge, his hand shook so much that he couldn't get the spoon to his mouth; then his arms and legs jerked about, and in two or three minutes he was insensible, and was carried off to bed. I saw him three hours after he had taken the pure carbolic acid, and found him profoundly unconscious, with stertorous breathing, pupils much contracted, and quite insensitive to touch and light, limbs all very limp, practically pulseless, strong tarry odour of carbolic acid, no sickness nor diarrhoea, no signs of blisters on lips, tongue, nor mouth (the family thinks he drank some cold water after the acid). In fact, at first all the narcotic and none of the irritant symptoms were present. I washed out the stomach with water and with milk—the resultant fluid smelling strongly of carbolic acid, and containing shreds of the mucous membrane of the stomach and some blood—then left two quarts of milk in the stomach, and injected two $\frac{1}{100}$ grain doses of strychnine subcutaneously (which markedly improved the pulse). At 3 p.m. he regained consciousness, and gradually improved. The urine passed during the night was as black as tar. By next morning his tongue, lips, and palate were all blistered, and his throat was very sore on swallowing. A bottle of crude carbolic acid is often kept about stables for using in connection with sores on horses, and it was from this source he got the poison.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY,
LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrmann, R. Bohrmann, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Forbes (Ashfield), Foord Hughes (Ashfield), Tayler (Woollahra), Scott (Balmain), Anderson (Petersham), Patrick (Marrickville), B. H. Collins (Redfern), J. Murray-Gibbes (North Sydney), Hanson (Waverley). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Brereton (Marrickville).

FIBRO-MYOMA OF UTERUS—HYSTERECTOMY—SECONDARY HÆMORRHAGE—ABDOMEN RE-OPENED—DISCHARGE OF LIGATURES BY BLADDER—RECOVERY.

By DAVID HARDIE, M.D., BRISBANE.

THIS case is of interest only because of its history subsequent to operation. In November, 1896, I was asked by Dr. Bancroft, to see with him Mrs. S. He informed me at the same time that he was leaving shortly on a holiday, and that should an operation be decided upon he did not consider it fair to do the operation and then leave the patient in my hands, and would therefore ask me to take charge of the case from the first. This was accordingly done, and to him I am indebted for leaving in my charge, a case that was of the greatest interest from first to last.

On examination we could feel a movable swelling about the size of the fist in the right iliac region. Per vaginam, it was felt high up to the right of the uterus, and bimanually could be moved freely in all directions. Did it proceed from the uterus, ovary, or broad ligament, or was it a floating kidney? It was not a movable kidney, as it was more pelvic than abdominal, and always was so, and it could not be made to rise out of the pelvis. It did not appear to move with the uterus, and the right ovary was free. It was therefore, probably, neither uterine nor ovarian. In this respect we were wrong, as it turned out to be a pedunculated myoma of the uterus. The neck was the size of the finger and fully an inch long, thus allowing the uterus and tumour to be moved separately without affecting the position of each other; hence our mistaken diagnosis.

The operation was performed at "St. Clair" private hospital, on 8th December, 1896, Dr. Bancroft assisting me, and Dr. Turner giving chloroform. The abdomen having been opened in the middle line, the tumour was easily removed. It was then found that there was another myoma the size of an orange, involving the left broad ligament, and for the removal of this it was necessary to include the body of the uterus and the left ovary and fallopian tube. Several ligatures having been applied, those nearest the uterus including the uterine vessels, these parts were removed. There was no hæmorrhage, and after all oozing had apparently ceased, the abdominal wound was closed. A section of the uterus afterwards revealed another small myoma, the size of a marble, embedded in its substance. There were thus three different myomata connected with the uterus in various

stages of development, one within the uterine wall, one sessile, spreading into the broad ligament, and another pedunculated, rising into the abdominal cavity.

Subsequent history.—That night she felt well, the pulse being 80 and the temperature 99.8°. Next morning at seven, the nurse telephoned that the patient was faint, and the pulse quick. On arrival, I found her very pale, and complaining of weakness and giddiness. The pulse was 140, and the temperature 99°. Fearing internal hæmorrhage, I asked Dr. Bancroft to see her with me. There was no abdominal distension, but we were of opinion that the symptoms clearly pointed to hæmorrhage, and after one of the most anxious consultations it is possible for medical men to have, decided to re-open the abdomen. This was done under ether, as Dr. Turner considered her condition too grave for chloroform. The wound having been opened, the pelvis was found full of blood. This was scooped out, and, although the bleeding had now ceased, a small coagulum on the stump of the uterus clearly showed where it had proceeded from. A double ligature was passed through the cervix and tied singly on each side, the pelvis washed out with sterilized water, and the wound closed. Meantime, the patient was getting extremely weak, and a hypodermic injection of Strychnine and Strophanthus was given. When the operation was but half over, Dr. Turner informed us that the pulse was scarcely perceptible, and it was decided to at once inject a saline solution into the arm. This was promptly done by Dr. Bancroft, with the assistance of Dr. Turner, while I was attending to the abdomen, and we each completed our part about the same time. I cannot adequately express my gratitude to these gentlemen for their active and valued assistance at this critical moment.

During the afternoon the temperature was 100°, while the pulse could not be counted, running, it was roughly estimated, up to 200. Injections of Strychnine and Strophanthus were given every four hours, and at 9 p.m. the pulse was 144 and temperature 99°. Next day, the 11th December, the temperature rose to 104°, but the pulse, though 150, was distinctly stronger. The bowels moved four times without medicine, and she passed wind and water freely. On the 12th she continued to improve, and by the following day the pulse was under 100 and the morning temperature normal. The stitches were finally removed on the ninth day, and the wound looked fairly well. It had not healed in all its length by first intention, but taking into consideration

that it was opened its entire length the day following the primary operation, I was well satisfied. Meantime, she progressed favourably, took her food well, slept well, had a daily evacuation of the bowels, passed urine freely, and felt very comfortable.

During the third week there was a slight rise in temperature, varying from 98.5° to 101°, and this I could not understand. It is here worthy of note that about this time she complained of some urinary disturbance, but I did not at the time associate the one with the other. This was made clear at a later date. The temperature was normal on 1st January, and after the 4th remained normal throughout.

During the month of January her only complaint was a feeling that she could not retain her water long, and the urine was frequently cloudy. She was discharged towards the end of the month, still complaining of urinary irritation, but otherwise in good health. Dr. Bancroft had now returned, and subsequently took charge of the case. He kept her on benzoates and other drugs, and once or twice washed out the bladder; still the irritation continued. One day in March, he called and showed me, to my amazement, a ligature that he removed from the bladder. There was some improvement in her condition, but it was only of a temporary nature. It was evident that there were more ligatures to follow, and indeed he felt something hard with forceps, but could not remove it. She was then put under chloroform early in April, and another ligature was removed. The urethra was sufficiently dilated to allow of the introduction of the finger, and we could feel at least two other ligatures, but they were not detached, and it was thought best to leave them until they spontaneously separated. This was done with great reluctance on our part, as both she and her husband were leaving in a week to attend the Jubilee celebrations in London. Dr. Bancroft informed them that these ligatures would almost certainly give trouble before their return, and, if so, asked them to call on Bland Sutton, to whom he explained matters, by letter. Before they reached England the irritation returned, and on their arrival, Bland Sutton removed four ligatures under chloroform. The urinary trouble ceased, and has not since returned, and she is now "in better health than she has been in her life."

This case is most instructive. Here were two complications in the after treatment, either one of which might have proved fatal. Had the abdomen not been opened to arrest the bleeding, she would almost certainly have

died, and, further, had this not been attended by the intravenous injection of saline solution, and the repeated hypodermic injections of Strychnine and Strophanthus, this secondary operation would probably not have saved her.

In connection with this complication, the question naturally arises, "Might it have been prevented?" I do not know. It has occurred many times in the practice of abler hands than mine. Should it have been prevented? Yes; but the days of perfect surgery have not yet come.

Again, it is surprising how little constitutional and local disturbance attended the ulcerations of the ligatures through the bladder walls. The temperature was certainly higher for about ten days from the beginning of the third week, but there was no local pain nor tenderness. It is equally surprising how these ligatures found their way into the bladder at all, as the bladder was certainly not in any way injured during the operations. I was somewhat relieved to find that similar cases of wandering of the ligatures into the bladder have been reported in the old country. Kolischer, in recording two cases, says it is not uncommon after operations on the ovaries.

UNIQUE CASE OF MATERNAL IMPRESSION.

By THOMAS WYLD PAIRMAN, L.R.C.P., L.R.C.S.
EDIN., CHRISTCHURCH, N.Z.

DURING her seventh pregnancy, Mrs. M. had residing in her house a gentleman boarder who was devoid of the left thumb. Her husband, again, had necrosis of the right thumb, which ultimately necessitated partial amputation. The deformities of the two men were often discussed in the family circle. The child was born minus the left thumb, and the right was atrophied, incapable of movement, and lying almost parallel with the fingers. The rest of the family were normal.

BRITISH MEDICAL ASSOCIATION. NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 26th August, at 8.15 p.m.

Business:—General.

GEO. E. RENNIE, Hon. Secretary.

Mr. BRUCK can now supply the *New British Pharmacopæia*. Price 10s. 6d.; post free 11s. 3d.

ACUTE INFLAMMATORY GLAUCOMA INDUCED IN A SUSCEPTIBLE PATIENT BY DENGUE.

By J. LOCKHART GIBSON, M.D. EDIN., M.R.C.S.
ENG., BRISBANE.

READ BEFORE THE QUEENSLAND MEDICAL SOCIETY.

A MARRIED lady, aged 58 years, commenced to suffer from an acute attack of dengue on Tuesday, 25th January, 1898. On that day she had no pain in either eye, and saw as usual with each. On the following day the left eye began to water and inflame, and its sight became much reduced. She suffered also from acute circum-orbital pain. She consulted me on January 28th, *i.e.*, three days after commencement of her attack of dengue, and two days after onset of her eye symptoms. She was feeling very unwell; her temperature was 101.5°. The left eye was injected generally, the cornea very hazy, and the aqueous turbid; anterior chamber shallow, pupil mediumly dilated and quite insensitive to light, tension N + 2. Barely a red reflection could be obtained from the fundus on account of the corneal, &c., opacity. Her vision was fingers at 2 feet, with a very restricted field. If any further confirmation of the diagnosis glaucoma had been required, I had treated the patient for chronic or simple glaucoma in her other eye in November, 1892.

I hesitated to advise immediate iridectomy as the patient was so ill, but decided to treat the dengue with salicylate of soda, instill eserine 1-600 grain three times daily, and postpone operation until the attack of fever had subsided, but to delay only if the eye symptoms improved somewhat during the next day or two. The sight did improve to count figures at two yards with a very restricted field, and the circum-orbital pain practically disappeared. I postponed operation until February 2nd, or five days after I first saw her, seven days after the onset of glaucoma, and eight days after the commencement of dengue. The rash, which had been well marked, had nearly disappeared, and her temperature had been normal for the first time on the morning before. A small iridectomy was done. The case did very well, and now sees $\frac{2}{3}$, and a few letters of $\frac{2}{3}$. Tension is normal, and her field of vision is only very slightly reduced, except on the temporal side, where it is normal. The refraction of the eye has been altered, and instead of requiring a correcting glass of +.5 D., it requires one of -.5 D., cylindrical axis vertical. In other words she has acquired 1 diopter of myopia in the eye's horizontal meridian, and .5

dioptr in its vertical meridian. The seven days' excessive intraocular tension must have been the cause of this change. The corneal wound may have caused the astigmatism, but it could hardly account for the alteration in spherical refraction. The case is particularly interesting, (1st) because the attack was clearly induced by dengue, and (2nd) because an iridectomy in the other eye, performed more than five years previously, protected that eye from joining in the attack.

The glaucoma in the right eye had been simple or chronic glaucoma, and had existed for nearly a year before she first consulted me. The sight during that time had become slightly less, and her field of vision more restricted. When I saw her in November, 1892, the central vision of R. E. was $\frac{1}{2}$, and partly $\frac{2}{3}$, while its upper, nasal, and lower perimetric fields were greatly reduced, and the temporal field slightly reduced.

A small iridectomy restored the sight to $\frac{2}{3}$ partly, and the perimetric fields improved as shown below, but without reaching normal. The improvement in the right eye has been maintained. This so far permanent result in the first eye is eminently satisfactory when compared with published statistics of results after iridectomy in chronic or simple glaucoma.*

Though I was disappointed at obtaining a cystoid cicatrix in the right eye, such a form of cicatrix has been supposed to have its advantages after operation for glaucoma, and it may have conduced to the permanency of my result. still it is not the variety of cicatrix one would strive after unless more proof that it is advantageous could be brought forward.

The following simple graphic record of the fields of vision of both eyes in 1892 and 1898, will give definite information regarding the results obtained, and it will give an instance of the much more favourable result of an iridectomy on even the 7th day of an acute attack of glaucoma, as compared with operation in an eye suffering from chronic or simple glaucoma:—

Before Operation on R., November, 1892.	Field of L. in 1892, and probably until Jan. 26, 1898.
8° 70° R 11° 14°	55° 55° L 90° 67°
April, 1898.	Two Months after Opera- tion on L., April, 1892.
15° 80° R 19° 50°	50° 45° L 90° 60°

* Noyen "Diseases of the Eye."

ON CANCER OF THE UTERUS.

BY EDWARD T. THRING, F.R.C.S. ENG., SYDNEY.

THERE has of late been a considerable amount of discussion in the medical journals on the subject of uterine cancer. Some time ago the chief points under consideration appeared to be the respective merits of supra-vaginal amputation of the cervix, for cervical cancer, as against extirpation of the whole organ, either with or without the uterine appendages. More recently the discussion has been as to the difficulties of making an early and exact diagnosis, and the treatment best suited to those suspicious cases in which clinical signs and symptoms point to possible malignant new growth. There is another aspect of uterine cancer which it is of importance to consider. I refer to those cases in which an absolute diagnosis of carcinoma, either of cervix or body of the uterus can be made, and in which the disease has not advanced so far as to preclude the possibility of a radical operation designed to cure the patient. Is the present recognized method of vaginal extirpation of the whole sufficient?

In the August number of the *Intercolonial Quarterly Journal of Medicine and Surgery*, 1895, I advocated the trial of a more radical operation, because of the unsatisfactory results following extirpation of the uterus for carcinoma of the cervix. Unsatisfactory in this, that although the primary mortality following the operation is low, recurrence of the disease takes place as a rule within two years, and the duration of life is usually not beyond three, or three and a half years after the operation. The secondary growth almost always occurs first, either in the stump of one or other broad ligament, or in the pelvic lymphatic glands, and it seems, therefore, that we ought to remove these structures if possible at the first operation, so as to give our patients a better chance of freedom from recurrence.

I was brought to this conclusion by a variety of reasons. First, on anatomical grounds, it appeared to be quite feasible to remove the folds of peritoneum forming the broad ligament, together with their contained lymphatic vessels, up to the pelvic wall, as well as to follow the lymphatics to the pelvic glands placed at the bifurcation of the common iliac vessels and remove them, and even the lower lumbar glands if necessary.

Second, in the few cases of cancer of the body of the uterus which have come under my care sufficiently early to justify removal of the uterus, the results, as far as recurrence of

growth was concerned, were far better than in cases of cancer in the cervix. This I believe to be due to the arrangement of the lymphatics, and to the fact that it takes longer for the cancer cells to go from the inside of the body or fundus of the uterus to the lymphatics of the broad ligaments, and the pelvic lymphatic glands. Two such cases are still free from recurrence at the end of seven and six and a half years respectively.

Third, I had by chance, and not design, done such an operation, i.e., removal of the whole broad ligament, and the pelvic glands, in a case of carcinoma of the cervix, which was complicated by extensive adhesions due to old pelvic peritonitis, together with cystic ovaries. The state of the parts compelled me to do a much more extensive operation, partly from the vagina, and partly through the anterior abdominal wall, than I had ever done before. The result was good, the patient being now, at the end of five years, in perfectly good health, and free from secondary growth. (In this case a small recurrent nodule did appear about one year after the first operation, in the vaginal cicatrix, this was freely removed, and during the past four years there has been no sign of further recurrence. I examined the patient a month ago and found everything free.

When I wrote my paper in 1895, advocating a more radical treatment of cancer of the uterus, by a combination of the vaginal and abdominal methods of hysterectomy, together with removal of the whole broad ligament and pelvic lymphatic glands, the idea was new to me, and I had not by design done the operation, nor had I seen it suggested by any one. After publication of the paper, I found that the principles had actually been carried into effect by Dr. Clark, of the Johns Hopkins Hospital, Baltimore, U.S.A.

In 1896 three suitable cases of cancer of the cervix came into my hands, and were operated upon in the manner suggested. So far the results have been successful, no recurrence having taken place, and I cannot but feel that these patients have a very much better chance of absolute cure than would have been the case had the usual operation of vaginal hysterectomy been done.

To illustrate this, I will quote one of the three cases. Mrs. C., *æt.* 30, married 6 years, two children, youngest two years old. Menstrual history normal until about six months before operation, which took place on July 9th, 1896. Periods then became profuse, and for the last month there had been more or less constant blood-stained discharge.

On examination, June 26th, 1896, there was found a small fungating growth of the cervix uteri, placed rather more to the left than the right, bleeding readily on touch, and giving the usual appearance, feel, etc., of an epithelioma of the cervix. Bi-manual examination showed the uterus to be slightly enlarged, freely movable, and apparently there was no infiltration of the broad ligament, nor could any mass be felt in the pelvis, either per vaginam or per rectum.

Microscopic examination of a portion of the growth confirmed the clinical diagnosis of carcinoma.

The radical operation, as suggested, was done on July 9th, 1896. The cervix freed per vaginam, the base of the bladder and ureters being lifted away from the uterus; Douglas' pouch opened, the uterine arteries being left to be secured from within the abdomen. The abdomen was then opened, the broad ligament on either side was then divided, and vessels tied separately close to pelvic wall, the ureters being looked for and avoided. The pelvic lymphatic glands of the left side were felt to be considerably enlarged, and three were removed from over and between the iliac vessels, together with a tail of lymphatic vessels leading up to them from the broad ligament.

The uterus and appendages having been removed through the abdominal incision, the cut edges of peritoneum were stitched over the raw surface, an aperture for a gauze drain being left into the vagina. The patient did well. On section of the lymphatic glands removed, they were found to be the seat of cancerous infiltration of various stages.

In this case, had the usual operation of vaginal hysterectomy been done, and it was apparently a particularly favourable instance, the patient would have been subjected to the pains and risks of a severe operation, with absolutely no chance of cure as the result. The infiltrated glands could not be felt by the ordinary methods of examination, nor would it have been possible to remove them, or the lymphatic vessels leading to them, by the usual operation.

No surgeon at the present day would dream of removing a cancerous breast and leaving infiltrated glands in the axilla. Why should we not apply the same principle to the uterus?

MARTINDALE AND WESTCOTT'S EXTRA PHARMACOPŒIA, 9th edition, 1898, price 10s. 6d., is now ready. L. Bruck, Medical Bookseller, Sydney.

SUCCESSFUL CÆSAREAN SECTION IN A CASE OF GENERALLY CONTRACTED AND FLATTENED PELVIS WITH ECLAMPSIA.

BY FERD. C. BATCHELOR, M.D., LECTURER ON MIDWIFERY AND GYNÆCOLOGY, UNIVERSITY OF OTAGO, N.Z.

READ BEFORE THE OTAGO SECTION, N.Z. BRANCH, B.M.A.

L. W., age 27, married eighteen months, consulted me on April, 1897, for dyspareunia and severe dysmenorrhœa. Examination showed the external generative organs ill-developed; there was marked vaginismus at the vulval orifice, the vagina was small and contracted. After free dilatation under chloroform the spasm of the external muscles was to some extent overcome. The os uteri was small and circular, and there was stenosis at the inner os. The cervical canal was freely dilated.

In May and June menstruation was almost painless. In July, again, severe pain was complained of during the period. Towards the end of this month and during the first week in August, five applications of intra-uterine galvanism, thirty milliamperes, negative pole, were made. Menstruation started August 12th and lasted till the 17th; it was painless. Following this pregnancy occurred; confinement was therefore expected on May 24th, 1898.

On November 19th, 1897, pelvic measurements were made:—

External Pelvic Measurements.

	Normal.	Case.
External Conjugate,	19-21.5 c.m. (7½-8½ inches.)	17 c.m. (6½ inches.)
Anterior Spines,	25 c.m. (10 inches.)	22 c.m. (8½ inches.)
Cresta,	29 c.m. (11½ inches.)	27 c.m. (10½ inches.)

These measurements were confirmed by subsequent examination.

Kelly's gynæcological method was also employed, and from these the true antero-posterior was judged to be slightly under four inches. These measurements seem to indicate a moderately contracted and flattened pelvis.

In April, 1898, another examination was made. By external palpation the fetal head was felt in the lower uterine segment above the brim; the fetal position was abdomino-anterior. The patient was perfectly well, and had no complaints. There seemed to be but little liquor amnii; the abdomen was rather small for the period of pregnancy. The urine was examined and found normal.

During the last week in May, I was daily expecting to be called in, and decided to visit at the end of the month unless sent for before.

On Monday morning, May 30th, 8.20 a.m., I received an urgent message from the nurse, requesting my immediate attendance as the patient was in convulsions. On reaching the house about 8.40, I learnt the patient had for three days previously suffered from what she thought a cold, and had complained of headaches. On Monday, at 1 a.m., she awoke and found that water was coming away (membranes ruptured); an hour later, pain started and she sent for the nurse. Pains were regular, but moderate, through the night. The first convulsion occurred at 8.10 a.m.; it lasted from two to three minutes, and left the patient unconscious. The nurse sent for me at once, but before my arrival a second attack had occurred. I found the patient unconscious, somewhat cyanotic, with twitching of the facial muscles; the respiration laboured, pulse 62, full and regular. Chloroform was at once administered. Two ounces of smoky urine were drawn off by catheter; subsequent examination showed it to be almost solid after boiling. Esbach's test giving eight per cent. albumen, faintly acid, sp. gr. 1022. Microscopically, it contained small renal epithelium, casts, blood-cells, and urates.

Examination of the genital tract: The perineum was firm and resistant, the vagina narrow and undilated, the os about the size of a five-shilling piece, the membranes had ruptured. The head presented in the left occipito-posterior position; it was entirely above the pelvic brim, and showed no tendency whatever to engage it. Bi-manually: The foetal head could be felt well flexed, its greatest bulk lying in the right iliac fossa above the pelvic inlet. It was large and disproportional to the size of the pelvis; a caput succedaneum was already forming. The promontory of the sacrum jutted unduly forward, the diagonal conjugate measured under four and a half inches.

By 9.40 a.m., by digital dilatation the os uteri was fairly easily opened up. During the necessary manipulation, several attempts were made to procure the forward rotation of the occiput by internal, and combined external and internal methods; these efforts were, however, futile. About 10 a.m., a first trial with long forceps was made, more to get the head to engage the brim or to procure forward rotation of the occiput than in any immediate expectation of effecting delivery, as, from the persistent rigidity and contraction of the soft parts, this was obviously out of the question until further dilatation had occurred. The

head was seized obliquely, a good hold obtained, and, after failure in attempt to rotate, considerable traction exerted, first the patient being in the lateral, and afterwards in Walcher's posture; no result whatever ensued.

I now deemed it advisable to send for further help. Dr. Roberts kindly gave me the benefit of his advice and assistance. As he was anxious to make a further trial by axis traction with his own forceps (in which he had much confidence), it was agreed to apply Jewett's modification of Tarnier's traction forceps. A good hold of the head was readily obtained and very considerable traction used, the only result being a marked increase in the size of the caput succedaneum; the head remained immoveable above the brim.

It was now quite evident that there was no chance of effecting delivery by ordinary methods. Even supposing the head could have been dragged into the pelvis, the narrow, undilatable vagina and resistant perineum must have caused great delay or extensive laceration before delivery could have been accomplished. Dr. Roberts therefore kindly took charge, while I left to make preparations for operation that was to be decided upon, and I further called in Dr. Barnett to our assistance.

On my return about 12.45, mid-day, matters were still *in statu quo*. There had been no progress whatever, the foetal heart was heard beating 140 per minute, the maternal pulse 84 full. After consultation, and carefully weighing the special points to which reference will be made later, we decided that Cesarean section offered the best prospect to both mother and child.

The operation itself was simple. The first incision extended from one inch above the umbilicus to about two and a half inches above the symphysis pubis, five and a half inches in length. The uterine wall was quickly laid bare, an elastic rubber tube passed over the uterus to temporarily compress the vessels of the broad ligament, and a four and a half inch incision made carefully to the membranes. The edges of the uterus bled freely, but hæmorrhage was skilfully controlled by Dr. Barnett. The membranes were torn through, and the left arm of the child protruded through the wound; it was pushed back and the left leg seized, some considerable traction being required to extract it; the right leg followed, and after this delivery was readily accomplished.

The amniotic cavity contained some meconium and a small quantity of liquor amnii. By drawing the edges of the uterus forward on either side, Dr. Barnett prevented any escape

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(equivalent to Proof Spirit 21.89 per cent.)	
TOTAL SOLID MATTER	1.81 "
MINERAL MATTER	0.13 "
SUGAR	0.13 "
FIXED ACIDS (calculated as Tartaric) ...	0.87 "
VOLATILE ACIDS (calculated as Acetic) ...	0.0072 "

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- BECAUSE unlike the Tincture and Fluid Extract of Bark, which precipitate their contents as a thick mud on dilution with water, LIQUOR CINCHONÆ HYDROBROM. is perfectly miscible in all proportions, yielding brilliant aqueous solutions which do not deposit or become turbid.
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- BECAUSE being highly concentrated, the ordinary Tonic dose is only five minims. As a Febrifuge and Anti-Periodic larger doses may be given at discretion.
- BECAUSE it is the only Cinchona preparation which can be prescribed with iron salts without blackening in colour or forming insoluble tannates.
- BECAUSE notwithstanding its manifest superiority to all other preparations of Cinchona, it is quite inexpensive; sixty-six doses costing only two shillings, or not more than one farthing per dose!

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into the peritoneal cavity. The placenta (situated on the posterior and fundal uterine zone) and membranes peeled off without any difficulty or more than the ordinary amount of loss. Dr Roberts, who administered chloroform, gave a full dose of ergot hypodermically before the operation was commenced.

A thick iodoform gauze plug ten inches long, was inserted from the fundus uteri and passed through the os into the vagina. Interrupted deep silk sutures about a quarter inch apart united the muscular walls of the uterus, a continuous fine silk Lambert's suture secured peritoneal apposition. The abdominal wound was closed in the usual method. The patient was returned to bed about 3.30 p.m. By about 8 p.m. she had regained consciousness; her temperature, which at the time of the operation was 100.8°, had fallen to 99° in the evening, above which it did not subsequently rise. The pulse rate varied from 75 to 95. The wound healed by the first intention, and the patient had no complication or trouble of any kind. She was on the sofa a fortnight from the date of operation.

The urine, the day after the operation, amounted to 62 ounces in the 24 hours; it contained only a trace of albumen; the secretion subsequently was somewhat scanty, and was loaded with urates; the albumen disappeared by the fourteenth day.

The child is healthy and strong. The measurements of the fetal head, made the third day after delivery, were as follows:—

	Normal.	Case.
Occipito-Mental	13	12.8 c.m.
Sub-Occipito Bregmatic	9.5	11 c.m.
Maximum	18.5	15 c.m.
Bi-Parietal	9.5	10 c.m.
Bi-Temporal	8	9 c.m.
Fronto-Mental	8	9 c.m.

The gauze plug was removed at the end of 48 hours, and the uterine cavity gently douched out with a solution of boro glyceride. Beyond this there was no local treatment.

REMARKS.—This case presents many points of interest. First, knowing from the pelvic measurements that there would probably be difficulty with delivery, would it have been desirable to have induced labour prematurely? In the light of subsequent events this may be readily answered, but under existing conditions at the time of the examination I did not feel justified in undertaking it; the eclamptic condition which rendered speedy delivery so imperative could not have been foreseen. The urine when examined a month before delivery was normal. Although it was recognised that labour was likely to be slow and difficult, there was no valid reason why a moderate-sized head

should not have been sufficiently moulded to have passed through the pelvis, and with time and patience one might reasonably have expected the soft parts to have dilated sufficiently to permit of natural delivery.

Second, at the examination in April, when an occipito-posterior presentation was diagnosed, should an attempt have been made to effect rotation forward? Some authorities advise this. On the other hand patients naturally object to manipulative interference prior to labour unless there is something radically wrong. We know a number of occipito-posterior presentations pursue a perfectly normal course, that rotation often occurs late in delivery when the occiput meets the resistance of the perineum, and further, where the normal forward rotation of the occiput does not occur, difficulty in delivery is generally considered due to obstruction at the outlet. Little stress is laid by most authors upon the difficulty of occipito-posterior position so long as the head is above the brim.

From reference to text-books it is apparent there is considerable diversity of opinion regarding the causes of delay in occipito-posterior presentation, the period of labour at which it is likely to arise, and the most appropriate time for and method of treatment.

Penfold, in the *American System of Obstetrics*, writes: "There is no difficulty in the superior strait." "Labour is longer, more painful, and more dangerous, hence some authorities advise that anterior rotation should be assisted," "should such assistance be decided on, it must be remembered that it should not be attempted in ordinary cases until the head has reached the floor of the pelvis."

In the *American Text-Book of Obstetrics* stress is laid on delay in the earlier stages of labour. "A long first stage, which is due to irregular, variable and ineffective pains, is always suggestive of a posterior position."

"The entrance of the head into the pelvis is said to be more difficult." "Since posterior labour is much less favourable than anterior, every effort should be made to prevent its occurrence," "for this reason, if for no other, the obstetrician should in every case endeavour to ascertain the position of the fetus by abdominal palpation some days before the advent of labour."

The patient is directed to assume the knee-elbow position several times daily during the last few weeks of pregnancy.

"Should the postural position fail no special treatment is necessary until after rupture of the membranes." Many other authorities might be quoted to illustrate uncertainty on this question.

It was my impression that at the visit a month before delivery rotation would not have been by any means easily effected, the abdominal walls were tense and rigid, there was very little liquor amnii, the uterus being closely applied to the foetus, and the limbs being very readily made out. At this examination, too, although I endeavoured by external manipulation to ascertain if the head could be pushed into the pelvis, I was certainly misled, for it seemed to me then that the head could be moved in to the inlet, which hardly could have been the case.

Third:—As to the choice of methods when operation was decided on.

Version was clearly inapplicable; the waters had drained away, and if we had been successful in bringing down the feet, it was evident the passage of the head through the brim, even if possible without breaking up the skull, would only have been accomplished after much delay and certain death of the child; furthermore, the narrow vagina and small rigid outlet would have inevitably been severely lacerated during the process.

Craniotomy.—Delivery would have been accomplished, doubtless, by this method; the stethoscope, however, showed the child still living, the operation would necessarily have been a very protracted one, and even with the greatest care much bruising, laceration, and damage to the soft parts were to be expected.

Symphysiotomy suggested itself, as on account of the increases in the antero-posterior and other diameters it doubtless would have allowed of the passage of the living child through the bony pelvis; yet, to accomplish delivery rapidly, as seemed desirable in a case of eclampsia, the same objection again presented from the rigidity and contraction of the soft parts. These would necessarily have been extensively lacerated, the urinary apparatus possibly implicated, with the consequent danger of septic complication with a wound through the symphysis. These were the reasons which decided us in favor of Cesarean section.

The main factor in success in this and similar cases, it seems to me, must depend on the length of labour, the manipulative interference to which the patient has been subjected, and her general condition at the time of operation. Dr. Roberts and myself, from a previous unfortunate experience, held strong views on this point; personally, after my first examination, I formed a decided opinion that the difficulties in delivery would prove insurmountable to ordinary methods, and was consequently most anxious in all my manipulations to avoid un-

necessary injury. Dr. Roberts, although desirous from previous favourable experiences in the use of his special axis traction forceps to give them a trial, fully appreciated the objection to anything like unnecessary mauling in a condition where the patient's chances depended on rapid delivery, and where the state of the pelvis and soft parts presented such evident difficulties.

To Dr. Barnett my best thanks are due for his valuable assistance at the operation, and the skill with which he controlled the hæmorrhage and prevented any escape of the uterine contents into the peritoneal cavity.

There is one point upon which I think authorities do not lay sufficient stress in this operation. We are advised to avoid going too low in our incision into the uterus and injuring the cervical zone, the principal reason given for this being that hæmorrhage there is more difficult to control. It should not be forgotten how in prolonged labour the lower cervical zone becomes stretched, thinned, and travels upwards. Although my incision into the uterus was probably three inches above the level of the symphysis, I yet found the uterine walls very thin at this part; there is not the same bulk of muscle to bring together, there must, therefore, be less satisfactory union and greater tendency to extravasation from the uterus into the peritoneum.

STRETCHER FOR APPLYING PLASTER-OF-PARIS TO FRACTURES OF THE FEMUR.

BY LAURENCE H. L. HARRIS, M.B., CH.M.,
SENIOR RESIDENT MEDICAL OFFICER,
SYDNEY HOSPITAL.

As one may infer from the heading, this stretcher has been designed for the purpose of encasing the lower limb in plaster when the fracture has involved the femur. A few remarks, together with the illustration, will describe the apparatus.

It consists of a framework made of galvanised iron tubing, one inch in diameter, and projecting at either end for six inches to form rests and handles. This frame is then divided into two parts, an upper and a lower; the upper part is intended to support the trunk, and measures two feet in length, and two feet six inches across.

It is constructed of cross bars of galvanised iron one and a half inches broad, fastened to the framework by means of screws, which give a little when the patient is in position.

The lower part is for the limbs and measures three feet in length, with the same breadth as

upper part. Between the two parts is a space of one foot, which corresponds to the lower part of the patient's spine. As seen in the illustration, there is a middle bar which dips to the extent of one foot between the upper and lower portions, and then it supports a flap on hinges made also of cross bars of galvanised iron in an iron framework, and which is reversible according to the limb which has been fractured.

The sound limb resting on this flap, the fractured one is supported merely by a foot-piece on a cross bar, and which can be adjusted to either side. It can thus be seen that a clear space is available for applying the plaster to the limb, and also for a spica.

For additional comfort, some blankets or padding of any sort may be placed upon the parts supporting the body, and the whole apparatus rests on trestles. The patient is gently lifted on to the stretcher, and here remains till the plaster sets, for after having applied the plaster, the stretcher, with patient on it, can be carried out into the sun.

As a rule, the patient does not feel any discomfort, though if further support be necessary a couple of cross bars can be placed under the seat of fracture. The foot piece slides up or down according to the height of the patient.



This apparatus can be used for adults or children, and will accommodate a person up to six feet, and weighing up to sixteen stone. It weighs eighty-two pounds, and two men can easily lift it with the patient on it. The advantages claimed are:—

- (1) The patient being quite horizontal, the plaster can be applied with greater accuracy.
- (2) The patient is saved the discomfort of the hernia block.
- (3) Plaster is applied in half the time.

(4) Assistants can be dispensed with.

(5) Patient can be carried out to dry without disturbing the plaster.

(6) The person applying the plaster is saved much inconvenience, such as stooping, etc., etc.

The manufacture of the apparatus was entrusted to Hannam & Co., of Pitt Street, Sydney.

A CASE OF PUERPERAL SEPTICÆMIA SUCCESSFULLY TREATED BY HYPODERMATIC INJECTION OF SALINE SOLUTION.

By G. R. EAKINS, M.D. BRUX., SURGEON-MAJOR VICTORIAN MILITARY FORCES, ECHUCA.

Mrs. F., 2-para, aged 22 years, was confined on March 23rd by a midwife, by whom she was attended for six days, when I was asked to see her on the morning of the 29th. I found her with a temperature of 105°, pulse 130, suppression of milk and lochia, headache, sleeplessness, a dried furred tongue, constipated bowels, a dirty sallow-looking countenance, a history of rigors on two occasions. Examination elicited no feeling of pain or abdominal tenderness, and nothing was anywhere else discovered to account for her condition, simply fever was the prominent symptom. A vaginal and intra-uterine bichloride douche given (strength, 1 in 3,000), and the following mixture: Recipe—Magnesiæ Sulphatis, one and a half ounces, Quininiæ Sulph. grains thirty, Acidi Sulphurici Dilute half a drachm, water to six ounces. Two tablespoonsful every three hours. Visited same evening; no improvement. An injection of Burroughs, Wellcome & Co.'s antistreptococcic serum was given next morning; no improvement. An examination under chloroform revealed no lesion of vagina, cervix or uterus, which was then curetted, swabbed with pure carbolic acid liquified by heat, lightly packed with 10 % iodoform gauze, as also vagina, occlusion pad of boracic absorbent wool applied, the combined dull spoon curette and douche being used. Nothing removed from uterus that would apparently cause symptoms, a dose of serum given at same time. Visited evening, no improvement; another dose of serum given. Next morning, no improvement; gauze packing removed, a creoline vaginal and intra-uterine douche given, as also a dose of serum, ordered half ounce doses of brandy with five minims of Tincture of Digitalis every four hours. Evening, no improvement; another dose of serum given.

As patient seemed to be in a very hopeless and fast-sinking condition, I thought I would try the subcutaneous administration of normal salt solution. I argued it might promote more efficient elimination by skin and kidneys. Accordingly, I administered a pint of the solution under the loose skin of the front of the right thigh, which was first carefully sterilized with Johnson's Liquid Antiseptic Soap, as also the canula and indiarubber tube with funnel attachment. I found from previous experience that it is best to use a good-sized canula, and that the administration takes from 10 to 15 minutes, the liquid was but barely warm. Next morning, finding temperature down, and a marked general improvement, this injection of the saline solution was given daily, a pint morning and evening, until I had given six pints, variously injected under skin of thighs, breast, and abdomen. Antiseptic douches were given morning and evening. Having to proceed to Easter Encampment, at Ballarat, I handed my patient over to the care of my colleague, Dr. T. O. Smith, who very kindly, at my request, continued the same treatment in my absence, and to whom is due much of the success. He administered about 12 pints with evident success, the patient holding her own very fairly, having a maximum temperature of 100° to 103°. As she got very sore from the injections of the saline solutions, they were occasionally omitted. On my return at the end of twelve days, I again resumed these injections, with further and pronounced improvement. Twenty-five pints were altogether given. Tender spots appeared in the neighbourhood of the left shoulder, into which I injected deeply a 10 minim dose of Morson's pure guaiacol, repeating the same in the evening. Finding that the temperature was slightly raised each evening, and that the guaiacol promptly checked it, I injected deeply into the gluteal region four more 10 minim doses, that is, 10 minims each evening. My patient during all this time was able to take plenty of nourishment, and made a complete and uninterrupted recovery, after a period of five weeks acute illness.

Here was a case of so-called puerperal fever, more properly puerperal septicæmia or infection, going on from bad to worse, in spite of five injections of antistreptococcic serum, uterine curetting, daily antiseptic douching, occlusion pads, and everything else that modern therapeutics had dictated, until the treatment by saline injections was adopted.

The success which is now accorded to the hypodermatic injections of saline solution in

ante and post-partum puerperal eclampsias, and of which I was the first in Australia to report a case in a paper read before this Society last year, has urged me to place this case on record, in the hope, as opportunities arise, that others may make trial of these injections and record their successes or failures, and so test the efficacy of what seems to me a rational plan of treatment in a disease which is the veritable *bête noir* of the general practitioner.

In conclusion, I would add my experience that marked falling of temperature attended the injections when the solutions were given cold, more so than when given warm; that the fall continued for eight or ten hours; that the complete absorption of the liquid under the skin took place within a period of four or five hours; that the flow of urine was increased; that the pulse was materially improved; that diaphoresis was increased; that the digestive and mental functions were undisturbed, as would have been by Quinine, Warburgh's Tincture, etc., or, in fact, drug treatment; that the injections in each case can be made within a period of 15 or 20 minutes, which is of so much importance to the busy medical attendant in saving of time; that the loose skin of the abdomen is preferably the best situation to inject; that in no case in which I have administered these injections have I witnessed any untoward result; that as no other treatment has met with much success, this deserves a trial; that the rationale of the treatment is an early and direct dilution of the poisoned blood in circulation; that it is devoid of the dangers of direct transfusion; that it can always be carried out by the surgeon in attendance without skilled or any assistance; that one pint morning and evening is a safe amount if intended to give daily; that the salt may be given from three to five grains to the ounce; that no more than a quart of saline solution should be administered at a time or within a period of two hours for fear of overcrowding a weak right heart, sudden heart failure being the result, or a sanguineous congestion of the lungs supervening; that a congestion of the lungs, if not hypostatic, might fairly be attributed to this cause if saline infusions are being given, septic congestion not being overlooked as a complication.

That the design of this paper is to advocate the principle of treatment by subcutaneous saline infusions in toxæmias.

That a deep hypodermatic injection of pure guaiacol, up to 20 minims, has its sphere of therapeutic usefulness.

NOTES ON A CASE OF CRANIOTOMY—SUBSEQUENT SUCCESSFUL INDUCTION OF PREMATURE LABOUR—CHILD INCUBATED.

By FRANK A. NYULASY, M.B., CH.B., HON. SURGEON, WOMEN'S HOSPITAL, MELBOURNE, VICTORIA.

As cases of this description are of interest to the general practitioner as well as to the specialist, I have thought that the following notes might serve a useful purpose if brought before you to-night.

On the morning of the 11th December, 1896, Mrs. O'D., a woman of small stature, a native of Dublin, aged 22 years, was, on the advice of a medical man, brought to the hospital by a trained nurse. The patient had been in strong labour all the previous night, the membranes having ruptured at eleven o'clock. I saw the woman at the hospital about eleven o'clock in the morning; the membranes by that time had been ruptured for twelve hours, the waters had all drained away and the uterus was in a state of tonic contraction, the os dilatable but scarcely half-dilated. I at once detected an antero-posterior contraction of the pelvis, and a rather large foetal head. I therefore took the external pelvic measurements, which were: Interspinous, 9 in.; intercrural, $9\frac{1}{2}$ in.; intertrochanteric, $11\frac{1}{8}$ in.; and the external conjugate, $6\frac{1}{2}$ in.; which leaves $2\frac{3}{4}$ in. for the internal conjugate; and internal measurement gave the same figures for the true conjugate.

Now, as I considered her pelvis (two and three-quarter inches with a large foetal head) too small for successful symphysiotomy, and her exhausted condition (and certain other circumstances which would have caused too much delay in operating) unfavourable for Caesarean section, I had no hesitation in doing craniotomy, which was not very easy in a pelvis of the above dimensions and with a child weighing eight and a half pounds. The placenta, which was nicely expelled, was found to be calcified on the uterine surface, the deposits of lime, so Professor Allen informed me, having taken place along the course of the vessels.

The mother made an excellent recovery and left the hospital well on the tenth day after admission.

Before she left, however, I made a calculation based, of course, on the size of her pelvis as to the possibility of delivering her of a living child, prematurely; and therefore told her if

ever she became pregnant again to come to the Institution before the seventh month, and I would bring on labour and endeavour to get her a living child.

Just about twelve months after the craniotomy she was seven months pregnant, and, with the concurrence of my colleagues, I induced labour, delivered her by "turning" of a fetus weighing three and a half pounds, and with the usual disproportionately large head of a premature child.

As showing my calculation was correct, I was just able to get the child through alive, and no more, for it required rather vigorous measures for restoring animation. It was a miserable-looking little object, and was incubated for three weeks at hospital and five weeks at home. It was fed on mother's milk, with small quantities of brandy and barley-water. Its measurements just before leaving the hospital (that is, on the seventeenth day) were: Weight, 4 lbs. (at birth, $3\frac{1}{2}$ lbs.); length, 15 in.; mento-vertical diameter, $4\frac{3}{4}$ in.; mento-occipital, $4\frac{1}{2}$ in.; mento-bregmatic, $3\frac{7}{8}$ in.; occipito-frontal, $4\frac{1}{2}$ in.; sub-occipito-bregmatic, $3\frac{3}{4}$ in.; bi-parietal, $3\frac{1}{8}$ in.; bi-temporal, $2\frac{1}{2}$ in. The mother's temperature and pulse never went above the normal, and both she and the child are still (now nine months after delivery) in excellent health.

In conclusion, I may remark that it does not often fall to one's lot to have to do craniotomy and induce labour at the seventh month on the same patient in one year.

We have received from Messrs. Burroughs, Wellcome and Co. a sample bottle of "TABLOID" BISMUTH SUBGALLATE, GR. 5, (0.324 GM.)—The internal administration of Bismuth Subgallate has lately received considerable attention. It has been most favourably reported on in various forms of diarrhoea and in fermentative dyspepsia. In chronic cases of the latter, excellent results have attended the regular administration of "Tabloid" Bismuth Subgallate 5 gr., one before or after each meal. Various Continental authorities have spoken highly of it as a therapeutic agent in typhoid, gastric catarrh, and in the treatment of Asiatic cholera. Bismuth Subgallate is insoluble in water or alcohol, and it is best administered compressed and in a dry state. The very rapid disintegrating property of "Tabloid" Bismuth Subgallate, and its great convenience, especially when, as in chronic cases, it is necessary that the doses be taken regularly and for a considerable period, make it the most reliable and acceptable form for the administration of the drug.

WANTED TO PURCHASE A GOOD BECK OR SWIFT MICROSCOPE. Send full particulars, with price, to J.F., care of L. Bruck, Sydney.

A FATAL CASE OF HYDATID OF THE LUNG.

By H. CRITCHLEY HINDER, M.B., CH.M.
SYD., ASHFIELD.

THE patient was a little girl, eight years of age. She had been ill for six weeks with cough, cold sweats, vomiting, and slight hæmoptysis. There was very little expectoration of any kind. The patient lived in the country, and had a phthisical family history.

On examination, there was some bulging at the left apex in front, with dullness in front, and in the axillary region down to the fourth rib. Expansion in this situation was almost nil. V. F. was very weak; breath sounds very weak and distant, with prolonged expiration. Below this area the breath sounds were loud and harsh. Posteriorly, the dullness was not so marked.

The apex beat is opposite the under end of the seventh left costal cartilage. The sounds are clear. The spleen and liver appear to be normal. The radial pulses are equal, quick, and weak. The tongue is coated.

On admission the temperature was 102°, respiration 24, pulse 128. In a few days the temperature remained at 98 and 99.5°. The urine was normal. Sp. gr. 1018. Acid with mucus deposit.

The child was prepared and placed on the table, and anaesthetised with Chloroform. About one inch of the second rib was removed, directly over the dullest area. A needle was inserted, and clear hydatid fluid withdrawn. An opening was made with a knife directly into the cyst, passing through about half inch of condensed lung tissues. The visceral and parietal pleuræ were adherent.

Directly the knife was removed, I inserted my finger and stopped the flow of fluid. The patient at this time had been allowed to recover from the anaesthetic to the extent of having lively reflexes. The fluid was allowed to leak out slowly, and when about 1½ oz. had escaped she coughed, and immediately bright scarlet frothy blood issued from her mouth and nose, somewhat mixed with hydatid fluid. I slipped my finger out, hoping to save her from drowning, but immediately bright blood and fluid was shot out of the wound with a rush, and in an astonishing quantity, so that I at once judged that a communication must exist, not only with the bronchus, but also with a large vessel, and so great was the escape that I almost thought that the heart itself was perforated. The child was removed to an adjacent ward, and was dead in a very short time.

Post-mortem.—The left lung was adherent posteriorly, and at the apex. The right lung was free. There was no fluid in the pleural sacs. In the upper lobe of the left lung was a large hydatid cyst 4 in. in diameter, containing a collapsed endocyst. The ectocyst communicated directly with the left bronchus and pulmonary artery, each communication easily admitting a No. 12 catheter, and both together opening in the floor of a slight diverticulum upon the inner aspect of the ectocyst. The ectocyst was filled with recent dark clot. The trachea was filled with blood. There was a little blood-stained mucus in the stomach.

No doubt, directly slight relief was given to the tense endocyst, the pulmonary artery and the bronchus were opened, and death quickly followed. Though it is interesting to note how effectually the tense endocyst blocked the opening in the pulmonary artery.

The record of such a catastrophe as this will no doubt induce surgeons to give a very guarded prognosis before operating for hydatid of the lung.

This case was kindly handed over to me by Dr. J. C. Cox, honorary physician. For the clinical and post-mortem notes I am indebted to Dr. McPherson, resident medical officer.

GASTRIC FISTULA CAUSED BY HYDATID CYST.

By R. G. MACDONALD, M.D., HON. SURGEON,
DUNEDIN HOSPITAL, N.Z.

THE following case is of some interest owing to its history, the vagaries of hydatid cysts, the immense gap in the stomach wall, and its satisfactory termination.

S—M—, æt. 21, admitted February last, complaining of jaundice, vomiting, wasting, and a lump in the stomach. The diagnosis was hydatid cyst of the liver, and the ordinary laparotomy was decided upon. The steps of the operation were exceedingly simple. Owing to the fluid contents of the cyst being muddy and bile-stained, it was stitched to the abdominal walls, a drainage tube inserted, and the wound left to granulate. On the third day after the operation, the nurse stated that the contents of the stomach came through the abdominal wound. This proved correct, and the question arose how did this fistulous opening occur? It was hoped that as the external wound closed the fistula would also close. This proved a delusion, and so, on two

separate occasions, I attempted to close the wound without opening into the peritoneal cavity. Both attempts failed, and, as almost the whole of the contents of the stomach passed through the opening causing troublesome irritation of the wound and surrounding skin, I decided upon opening the peritoneal cavity and stitching the stomach apart from the abdominal wall. With some difficulty, the adhesions between the stomach wall and abdominal wall were broken down; then it was found that the cyst wall was also adherent to the stomach wall, and this involved more breaking down of adhesions. When this was finished, the gap in the stomach wall was so large that I could easily introduce the whole of my hand within the organ. The gap was so large, so ragged at the edges, the stomach walls so soft and friable, and the whole thing so unpromising that there seemed little hope of making a water-proof seam of the wound. First, a close row of catgut sutures, involving all the coats of the stomach wall, were inserted. This was then turned inwards, and the peritoneal surfaces were stitched after the Lembert fashion. Owing to the ragged state of the wound, I was afraid to drop it into the peritoneal cavity to let it look after itself or to be contented with an omental graph, and so I again stitched it to the abdominal wall. It was well I did so, for next day, bile and gastric juice freely oozed through it. Mild suppuration now set in; this effectually glued all the loopholes in the breach, and then the case went on perfectly satisfactorily.

Remarks.—It is probable, though I was not aware of it at the time of operation, that the adventitious cyst wall was adherent to the stomach wall. This, by pressure and lack of nutrition, weakened the organ. The previous vomiting and wasting point towards stomach irritation and interference with nutrition. It is possible, also, that some of the liquid contents of the stomach may have found their way through this weak spot into the cyst, and thus account for the unusually muddy state of the cyst contents. The wound in the stomach was near to the pyloric end, and involved the greater part of its circumference. On this hangs a query. Will this large wound lead to stenosis or other change in the organ?

Mr. BRUCK has received a full supply of Marmorek's Antistreptococcus Serum. Price 6s. a tube.

The Hon. Librarian N.S.W. Branch, B.M.A., requires *The Lancet*, No. 3,866, October 2, 1897, to complete series. He would be glad to receive this number, addressed to 121 Bathurst Street, Sydney.

CASES OF AMPUTATION AT SHOULDER JOINT AND SUPRA PUBIC LITHOTOMY PRESENTING UNUSUAL FEATURES.

BY JAS. E. TREVOR, M.R.C.S. ENG., ASHBURTON, N.Z.

READ BEFORE THE CANTERBURY SECTION NEW ZEALAND BRANCH BRITISH MEDICAL ASSOCIATION.

I MUST first thank you for asking me to read a paper before this Society. On my being invited to do so, the wish was expressed that the country and town members might be brought more into touch with one another. The idea is a good one. Excuse the suggestion that this perhaps might be done more effectually by means of a medical circulating library. Cases out of which to make good medical papers are in the country few and far between. Those which I now give cannot claim any scientific value, or anything new or original in treatment. Still, I hope they may help to pass a not unpleasant or unprofitable evening, and may possibly be of some practical value. When, many years ago—now far too many—I was a student at St. Mary's Hospital, and dresser to Coulston, the then greatest lithotriptist of the day, he said to me that the motto of every medical man should be "*Nil desperandum*," and I use this as a connecting link between two cases which have otherwise nothing in common.

My first A. B., a strong, healthy, and temperate young man, was admitted into the Ashburton Hospital with simple fracture of forearm, radius and ulna, caused by a flax machine. Being myself in bed with influenza, I did not see him for three or four days. The arm was then much swollen, but more painful. I directly placed it in as comfortable position as possible, but feared the result. Next day it was much worse; some blisters had formed, and an erysipelatous blush extended over the greater part of the arm in front, almost to the shoulder. Hoping to relieve this, and possibly obtain something like a line of demarcation, I made free incisions into the forearm, afterwards using carbolic acid dressing. There was scarcely any bleeding from the incisions, or after-discharge on the dressing; the vessels were evidently occluded, and the state of the arm hopeless. Next morning I thought the redness on the arm had rather decreased, and left, hoping there might be soon a prospect of operation with some chance of success. I saw him again in the evening, and found him in every respect much worse. He was in great pain, rapid pulse, and dry tongue. Temperature

I cannot state, having been too ill myself to trouble about notes. He expressed a strong desire for amputation, to which he had previously objected. The redness on the arm had extended to a little above the insertion of the deltoid, but on the back there was more healthy tissue, sufficient to form a good long flap. The entire right side of the chest—it was the right arm—had become swollen, œdematous, and discoloured, as if from a severe bruise, although it had not received any injury at the time of the accident. This had been coming on for a day or two, but had rapidly increased; but what showed still more how profoundly the system had become deranged was the fact that, on the left arm, the cicatrices of vaccination had become emphysematous, crepitation being distinctly felt on pressure—a state similar to what I had seen in old wounds after yellow fever in the West Indies. He did not look like living 48 hours, and was altogether a most unlikely looking case. Still, acting on Coulston's motto, I determined to dis-articulate at the shoulder joint, amputation being out of the question on account of the extent of the erysipelas. In operating, I had only a faint hope of saving life, but trusted to make his last hours more comfortable. I obtained the valuable assistance of Dr. Leahy—others could not come, being, like myself, laid up with influenza; but with the matron to give chloroform we managed very well. The anterior flap was as long as I could make it, but of necessity much too short; the muscular tissue looked healthy, but there was scarcely any tendency to bleed, doubtless owing to the vessels being blocked. I was able to make the posterior flap a good length, the tissues looking healthy. I was unable to bring the two flaps together, but had no confidence in the anterior one. Thanks to the skilful manner in which Dr. Leahy followed my knife when making the posterior flap, there was no loss on dividing the artery, and the operation was almost bloodless. He passed a good night, and in the morning I considered there was an improvement in his general condition. In my absence he was seen next day by Dr. McGregor, the Government Inspector, who called on me and expressed his regret that I was about to lose one of my patients. I told him I feared it might be so, but did not despair of his recovery. With a kindly smile he told me he was pleased to find me of a sanguine temperament, but evidently did not think highly of my prognostic ability. The after history of the case only requires a few words. His general health rapidly improved. He was a good illustration of how quickly the system

will right itself when a source of irritation is removed. Nearly all the anterior flap sloughed away, the posterior remaining healthy. Ultimately, by stretching the posterior flap and refreshing the edges, I was able to bring the two flaps together and obtain union, and he left the hospital with a very good stump. I was enabled to inform Dr. McGregor by letter that, 17 days after the operation, the man walked half a mile to see the Caledonian sports. The doctor telegraphed back his congratulations, and afterwards mentioned the case in his annual report. I think I may claim that this case teaches us never to despair.

My next case is that of an elderly farmer, over 60, but of good constitution, strong and hearty. He had, in February, 1895, just returned from a trip to the old country. Had noticed for some months an increasing desire to micturate, with pains about the bladder, but had not considered it of sufficient importance to consult a medical man till his return to New Zealand, when he came to me. I told him that I suspected a calculus, and that an examination of the bladder was necessary. I passed a silver catheter, and made a very careful and prolonged examination, but failed to discover a stone, and was on the point of telling my patient that I was mistaken as to the cause of the trouble, and was withdrawing the catheter, when I felt a little grating, and soon unmistakable evidence of calculus, and recommended an early operation. This was agreed to, but it was arranged that there should be first a consultation with Dr. Leahy, which took place a few days afterwards, when he introduced a sound, making a long and careful examination, after which, with a true Irishman's politeness, he stated he was quite certain there was a calculus, because Dr. Trevor had said so, but he entirely failed to discover it, at the same time giving me the handle of the sound. I confess I felt non-plussed when, do what I could, not a sign of anything but a healthy bladder could I find, and in despair withdrew the sound, with an unpleasant feeling that Dr. Leahy's politeness was not quite free from sarcasm. However, *nil desperandum*, and, taking an ordinary silver catheter, I directly caught the stone, and placed its existence beyond the possibility of doubt. I have purposely enlarged upon the difficulty of finding the calculus, because a practical lesson can be learnt, which may be to some of us of great importance. For my part, I determined never to commit myself as to the non-existence of a calculus on one examination. My discovering it the first time was a fluke. Had I failed, and

stated the bladder was free, the trouble would have continued, the man would have probably gone to some other surgeon, most likely to one of you Christchurch gentlemen, I should have lost a good paying patient, and there would have been another text from which to preach the superiority of town to country surgery. Another reason for dwelling on this point is, that when, some few years ago, I related before the members of this Society two cases of suprapubic lithotomy, one member, and a very good surgeon too, stated that calculus appeared to be so rare a disease, and that he had so often examined the bladder without any result, that he had almost given up the use of the sound. I do not know if this is a common experience; if so, this case may be a useful warning.

Arrangements were made for an operation. I determined on the supra-pubic, because I believe the after results of removing a stone to be vastly superior to that of crushing, and also from having experience in this operation and not in the lateral. And now for the chief incident of the operation. I must freely take blame to myself. It is the only point which makes it worth recording. I had done the operation twice before, and had often practised on the dead body, but had not gained by my experience; on the contrary, had only become too confident and careless. I did not pack the rectum, not attaching much importance to it; but my principal fault was in not taking sufficient trouble in injecting the bladder, the more blame to me, as the patient was an old man, consequently the bladder more deeply set in the pelvis. In consequence of this neglect, I had unnecessary trouble in reaching the bladder. However, I did it, and removed the stone, which I place on the table. I sent a message to the wife to say the operation was completed and everything all right, and had the patient removed from the table to his bed, and when there I saw to my horror a knuckle of intestine in the wound. I confess to a feeling of something very akin to manslaughter. How this mishap occurred I cannot say. During the operation I had not the slightest suspicion of anything of the kind, but, of course, the natural suspicion is that it was done by my knife, although Dr. Leahy, who was with me, appeared to think it occurred during the removal of the patient from the table to the bed. If so, it suggests great care in handling a man after such an operation; if not, it points to the importance of packing the rectum, and care in distending the bladder. However this may have been, the question of all importance was how to meet the emergency. The motto with

which I began was the first point, and to combine with it prompt action. I soon made up my mind, and asked Dr. Leahy to again give chloroform, having determined to make a sufficiently free incision into the peritoneal cavity to well wash it out, as it was most likely already contaminated by urine, as also to be certain that it was well sutured, especially at the lower part. This was very quickly done. I left the original wound open and introduced a soft catheter, which I retained for several days, with the exception of withdrawing it for short periods. Of course, I watched him very closely, and every twenty-four hours that passed without bad symptoms was no small comfort to me. The after history of the case was uneventful. He made just as good and rapid recovery as if the peritoneal cavity had not been wounded, and has remained well ever since.

PROCEEDINGS OF BRANCHES.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting, held at the University on Thursday, July 28th, 1898.

Present: The President (Dr. Swift), Drs. Symons, Lendon, Poulton, Marten, J. C. Verco, W. A. Verco, Altmann, Gunson, J. A. G. Hamilton, Michie, Harrold, J. H. Evans, Perks, G. C. Hayward, Morgan, H. Evans, Clindenning, and Hon. Sec. (Dr. W. T. Hayward). Dr. Douglas as a visitor.

The minutes of last monthly meeting were read and confirmed.

Dr. POULTON gave notice that at the next monthly meeting of the Branch he would move:—"That the Council be respectfully requested to take such steps as may be necessary for securing the removal from the membership of the Branch of those members who continue in association with men who have been expelled from the British Medical Association."

The evening was devoted to the exhibition of clinical and pathological cases by Drs. Harrold, Hayward, Fischer, Symons, J. C. Verco, and Prof. Watson.

Dr. JOS. C. VERCO shewed a polarising saccharometer, and albuminimeter, with which the percentage of sugar or albumin in a sample of urine could be at once determined, by the degree to which the polarised light was deflected to the right or to the left.

He also exhibited drawings of the amoeba dysenteriae, taken from living specimens, so as to show the changes of shape which they undergo during their amoeboid movements. Sometimes these were very slow, so as to easily admit of being drawn. At other times they were so rapid, and jerky, and variable as to defy figuring. The parasites were obtained from a patient who had been in the colony for five years, and had had an attack of dysentery for nearly six months, complicated by a hepato-pulmonary abscess. The amoeba were found in the discharge from his abscess cavity, and in the intestinal ulcers. Their movements were demonstrated to several medical men. Dr. Verco

showed the dead amoeba in some pus preserved in formalin. The interest of the case lies in the fact that this is the first time the parasite has been recorded as found in Australia, as far as we can learn. It has been recognised in Europe, and Africa, and North and South America. Australia may now be added to its habitat. Probably many cases of so-called "tropical abscess of the liver," and many more of chronic dysentery are due to this protozoan. The full particulars of the case will be brought before the Branch at a later date.

Dr. W. T. HAYWARD shewed a lad whose tendo Achillis had been divided close to its insertion by a rather sharp edged stone. The wound in the skin was freely enlarged both vertically and horizontally, and thoroughly cleansed. As sutures inserted in the tendon easily cut out on traction being applied, at Prof. Watson's suggestion isolated strands of the tendon were tied with chromicised catgut, which was attached to the aponeurotic extension into the calcaneum, and by this means the divided surfaces were brought into opposition, the major part of the tendon not being constricted. The sheath of the tendon was re-united by a continuous catgut suture, and the external wound accurately closed. The foot was put into plaster of Paris, which was not removed for two months, no bad symptoms having arisen. Ten months have elapsed since the accident, and the lad is able to play football and ride a bicycle as well as he could prior to it.

He also exhibited a child aged 8 years, upon whom he had operated for empyema, resecting a portion of a rib, and washing out the pleural cavity. The interest of the case consisted in the fact that the drainage tube was removed on the third day after the operation, and was not replaced, no recurrence of the effusion taking place, and the child making a rapid and easy recovery.

Dr. SYMONS exhibited two sections of an eyeball, one put up in gelatine, the other in formalin, according to Russel Smith's method.

PITYRIASIS RUBRA.

By ROWLAND E. HARROLD, M.B., Ch.M. EDIN.,
ADELAIDE, S.A.

A. J. Q., *et.* 22, consulted me on May 14th, 1898, about a scaly skin disease from which he had been suffering since December, 1896. The history of the affection is as follows:—

The condition began as a scaly rash of the scalp, and slowly spread over the entire body, taking the following course: head, neck, chest, back, abdomen, and last of all the extremities. The patient states the whole of his body was covered with dense layers of scales which were as thick as the peel of an ordinary orange, and where this covering became cracked by the movements of his body the surface of the skin bled, this was especially noticeable about the abdomen and flanks, also bend of the knees.

He consulted a medical gentleman until May, and on the fifth of that month, finding he was not improving, he entered the Adelaide Hospital. In that institution he was looked upon as an interesting case, and was photographed. He has kindly lent me a proof for you to see, and it well shows the condition he was in. Whilst there he was placed upon the Thyroid Gland Treatment, beginning with 15 grains a day, and finally taking 40 grains. Under this he greatly improved. After six month's residence there he left with his body free of scales, except over the buttocks. Two months later (January, 1898) the condition re-appeared, and his whole body was once more in the possession of the disease. He was now treated at his own home, but not with any apparent relief.

I saw the patient for the first time on May 14, 1898, when I found the following condition:—The whole body was covered with scales, some large, others fine and bran-like, these were easily removed and the surface exposed did not bleed, but was of a bright red colour. The skin was soft, and did not show any sign of infiltration, he did not complain of any itching, and the nails were quite healthy, the body was somewhat emaciated, and he felt the cold acutely. The bed was freely covered with scales shed quite recently, and he informed me it was a daily occurrence for a large dustpanful to be removed from the bed.

Treatment.—I placed him on a good, generous diet, with rest and warmth, and ordered a mixture containing:

Liquor Arsenicalis Hydr. m iii.

Tinct. Ferri. Mur. m x

Inf. Quassiae

thrice daily. The whole surface of his body to be anointed with vaseline night and morning. Under this treatment he rapidly improved, the scales left, and the skin was an intense red colour; this has nearly all left, and the natural healthy tint has replaced it. He has gained flesh, and is now able to be about.

I have shown you this case, as it is a somewhat rare condition in this city, and has so rapidly improved under the Arsenic and Iron treatment, and the dose of the former drug so small. It is my intention to increase the dose, and keep him under the influence of the drug for some time to try to prevent a recurrence.

PROFESSOR WATSON showed the following specimens:—

1. Bilateral subdural hæmorrhage from a man *et.* 39, with an indefinite history of syphilis and sunstroke in his youth. Three years ago he had been rendered unconscious by a blow on the left side of the head. Latterly had suffered from headache and insomnia, &c. The fact of the hæmorrhage being bilateral is suggestive of hæmorrhagic pachymeningitis rather than of traumatic hæmatoma of the dura mater. Dr. Anderson, of the Fremantle Hospital, W.A., who procured the specimen, inclines towards this view of the case.

2. Hydatid of brain from boy *et.* 12. History of blow on the head when four years old. The parasitic cyst is the size of a cricket ball. It has developed at the expense of the left parietal lobe on the surface of which (and on the corresponding dura) it abuts over the area of half-a-crown. The cranial sutures showed no sign of separation. Dr. Fischer, to whom we are indebted for the specimen, will publish the case later on *in extenso*.

3. Forearm of a muscular man, *et.* 21, whose gun went off while holding it by the muzzle. A loose charge of duck shot tore through the anterior carpal ligament and ploughed a track upwards in the flexor muscles. The arteries and nerves were uninjured except that a single pellet had lodged in the median nerve and caused perverted sensation. Notwithstanding its baptism of fire, the lead produced sepsis, which necessitated removal of fore-arm at the highest possible level, just below insertion of the biceps. Wound healed forthwith. (Dr. Poulton).

Separation of the lower epiphysis of the femur, from a girl *et.* 12, who twelve months ago pricked her knee with a needle with which her brother had opened a pustule. A septic arthritis ensued, which eventuated in ankylosis in flexed position. Two months ago she came to town to have the knee straightened, and although the greatest gentleness was employed, juxta-epiphysal suppuration set in and extended up the

shaft, through which amputation was performed six weeks later, and the medullary canal scooped out and disinfected. Stump healed without further suppuration. (Dr. Poulton).

4. Mammary cancer, from an old woman. It is interesting only on account of its extreme hardness and duration. (Dr. Poulton).

5. Mammary carcinoma and axillary contents from a multipara *æt.* 49. Of interest, especially when compared with the next specimen. Twenty years ago patient noticed a lump in the sternal quadrant of breast, which is represented in the specimen by a thick walled capsule filled with detritus, evidently the remains of a sebaceous cyst. A causal relation has been suggested between this cyst and the associated rapidly growing alveolar carcinoma with early infection of axillary glands. (Dr. Poulton).

6. Duct cancer of right breast from a thin ninepara, *æt.* 48, in whom for 20 years a movable lump remained stationary, and then increased in size and became painful and discharged blood-stained fluid. Axillary glands were not interfered with, because this variety of cancer is not very malignant. (Dr. J. A. G. Hamilton).

7. Ano-coccygeal dermoid the size of a large egg, from a man *æt.* 60, who, 40 years ago, was staked through a pair of buckskin breeches, and shortly afterwards noticed a small lump. Naturally the question of implantation suggests itself, and I am not prepared to dispute it. The cyst contains sebaceous matter, but no hairs. (Dr. Way).

8. Hypertrophy of Infra-vaginal, and elongation of supravaginal cervix, in a prolapsed uterus, with bilateral tear of os, and a shilling-sized vestibular ulcer of the posterior lip. The sound passed in six inches! The correlated perineal rupture was repaired on the twelfth day after the vaginal hysterectomy, in which ligatures were used instead of clamps. (Dr. Way).

9. Prostatic sarcocele of right testicle, from a man *æt.* 72, with a catheter-life of 12 years. The other testicle sloughed away last year. Fistula in ano, and double inguinal hernia then appeared. Ilio-inguinal incision, with separate ligation of the three arteries of the cord on the face of the stump. As the vas deferens does not undergo obsolescence from disuse, as one would expect, after loss of its gland (Prof. Allen), that of the left side was hooked up with a nerve hook, and vasectomy performed between two tendon ligatures. It was found even thicker than on the other side, where the testicle was present. The fistula, hernia, etc., were not interfered with. (Dr. Way).

10. Spheroidal myoma of corpus uteri, the size and shape of a husked cocoa-nut, associated with salpingo-oöphoritic adhesions and hydrosalpinx, removed from a married woman, *æt.* 41, with a history of two miscarriages of early fœtus. After the usual linea alba incision, the round ligaments were cut free, and the uterus pushed up with O'Sullivan's collarette. Landau's clamps placed temporarily on the broad ligaments controlled the ovarian set of vessels while the uterus was being amputated at a high level. The uterine vessels and a small bridge of posterior peritoneum were included in silk ligatures passed with a cleft palate needle. The ovarian vessels were then secured at the pelvic wall, and the appendages cut away, with the exception of the larger portion of the left ovary, which was small and fibrotic, and inseparably adherent to the sigmoid flexure. The cupped uterine stump was closed over the cervical canal (after a mucous polyp which presented at the internal os had been twisted off) with six chromicised tendons of small size. Symperitoneal line of suture with interrupted unchromicised tendon.

Abdomen closed in two layers after sluicing peritoneum with hot saline solution. No drain. Patient doing well. (Dr. Lendon).

11. Pear-shaped myoma, with ulcerated sloughy surface, which presented at the vulva of a multipara, *æt.* 61. It was removed with a wire ecraseur. (Dr. Lendon).

12. Large composite ovarian cystoma, associated with a peculiar jelly-like œdema of subcutaneous fat, hydropertoneum, myomata of uterine cervix, and lithopædion. From a fourpara *æt.* 66, a patient of Dr. Hayward. After withdrawal of two gallons of clear, alimy fluid, it was found impossible to deliver the cyst, even after the abdominal incision had been carried up to the level of the umbilicus; the operation was confronted by an immovable pelvic portion, filled with intra-cystic growths, and adherent to the back of the uterus, and to the left side of the rectum. A trilobate myoma of the cervix, burrowing into broad ligament on the right, and capped by the compressed bladder in front. The round ligaments were now searched for and cut adrift, the left one being much hypertrophied both in thickness and in length. The right (opposite) broad ligament was divided between the uterine cornu and the ovary and the uterus pulled up with sailmakers' hooks, thereby delivering a mass like the head of an adult femur from between the right uterine artery in front and the corresponding veins and the ureter behind. The cervix was then cut across just above the vaginal vault and the other uterine artery clipped. A second mass bearing the same relation to the last that the greater trochanter does to the caput-femoris, was delivered from below upwards, "à la Doyen," thereby stripping it from the bladder which was spread over it like a hood. The ovarian cyst was then easily delivered and the clips all replaced by ligatures. In the floor of the pelvis the remains of a three month's lithopædion were unexpectedly discovered. Dr. Way suggested dermoid, but, as you can see, there are the shafts of long bones present which are never found (Bland Sutton) in a dermoid. The abdominal cavity was sluiced out with hot saline which brought out some more spiculae and plates. The cervical canal was closed with three chromicised tendons. The abdomen then filled with hot saline 110 deg., and closed without a drain in five layers. Patient doing well. (Dr. Way).

JULY MEETING of the South Australian Branch of the British Medical Association.

Dr. POULTON showed a middle-aged spinster, who has been subject to varicose veins and ulceration of the leg. Five years ago he had performed Trendelenberg's operation (ligature of the saphena in mid-thigh) for wide-spread varicosity and ulceration about the lower leg. The varices had not recurred, and the ulcer had remained healed until six months back, when one large and several small ulcers appeared. Two months ago, after three months treatment by ointments, etc., Dr. Poulton applied grafts from the other thigh, Thiersch's method, with absolute and immediate success. Also a man whose carpal bones had been removed for tubercular disease. Primary union of the incisions had been obtained, and the patient was gradually recovering very good use of the hand.

PATHOLOGICAL EXHIBITS.

Dr. POULTON exhibited a mammary scirrhus, with the glands, removed from the axilla. The lower extremity of a little girl, removed at the middle of the thigh for osteitis femoris and separation of the epiphysis following septic arthritis, due to the prick of a pus-covered sewing needle. Immediate union had

followed the amputation, although there was a large sinus in the tissues of the thigh. Also a forearm amputated for a lacerated gunshot wound of the anterior aspect, without wounds of the main arteries, but with a large pellet buried in the median nerve.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary meeting was held on June 29th, at Austral Buildings.

Present: Dr. McAdam (President), Drs. Meyer, A. L. Kenny, T. H. McGee, Nihill, H. Owen, Loughnan, Newman, J. L. Greig, Halley, O'Sullivan, Nyulasy, Cuscaden, Martell, J. A. Sutherland, Bakins, G. H. Naylor, Hodgson, Goodall, J. R. M. Thomson, Black, and the Secretary.

Dr. CUSCADEN gave notice that he would move at the next meeting that "a letter be sent from this Branch to the Board of Public Health that the fee for notification of infectious diseases be raised from 1s. to 2s. 6d."

Dr. W. KENT HUGHES showed, for Dr. Snowball, a case of Hermaphroditism in a child of 4 years, who had been hitherto brought up as a girl. There are two bodies in the labia majora or split scrotum, which seem more like testicles than ovaries from their shape and size, and there is apparently an epididymis surrounding the body—the structures running upwards from the gland seem to consist of the ordinary male cord. The clitoris is large, and has a dimple in the prepuce, but the glans has no trace of an urethra, and the mother is certain that the child passes her water like a girl; the meatus urinarius is well out of sight in the vagina. Below the clitoris there is a vestibule, and the labia minora are small. The vaginal opening is of medium size, and a probe passed into it for about two inches; per rectum there was almost no tissue between the bowel and the probe.

Dr. O'SULLIVAN examined the case per rectum, and did not think there was any trace of a uterus, and though there was a reasonable doubt about the bodies in the labia majora, still it was probable they were testicles, but no certainty could exist unless a microscopic examination were made.

From a sociological standpoint the child should be brought up a male; it was not a case of distinct hermaphroditism.

Dr. BLACK asked what was the effect of registration in such a case?

Dr. MARTELL related the facts of two cases that came under his notice at the Women's Hospital. Their ages were 10 and 12, and had, at Dr. Figg's suggestion, been brought up males.

Dr. FELIX MEYER showed a case of persistent branchial clefts in a lad of 18. There were two openings on either side above the sterno clavicular articulations, upon the anterior edge of the sterno mastoids. A probe passed upwards towards the pharynx for at least three inches, though no communication with it could be made out, either with a probe or with the milk test.

The following cases were exhibited for Mr. Herman Lawrence, M.R.C.P., Edin., etc.:—

(1) Lupus vulgaris of face and palate.

In this case the lupus vulgaris had primarily affected the soft palate and tonsils.

(2) Lupus Erythematosus (capillary variety) of nose and cheeks.

The patient, æt. 28, has had the disease continuously for twenty years.

Consulted me about three weeks ago.

The skin over the nose and adjacent portion of either cheek had become scar tissue, whilst the skin over the malar eminences still remained markedly red.

Eight days ago, I operated by my method of multiple cross incisions, followed by continuous pressure, upon the left side of the face, which was in a decidedly worse condition than the right side. I now bring the case before the Society to show that the operation has practically removed the disfigurement of the part operated upon. And I hold that this particular variety of lupus erythematosus might be operated upon successfully by this method, as soon as the disease is definitely diagnosed.

Dr. A. L. KENNY called attention to the difficulty about the new Pharmacopœia. There was no body here which could settle the matter, and he therefore proposed "That a meeting be called of representatives from the various medical associations, and the Pharmacy Board, to consider the matter, and agree to commence to use it upon a certain date." (Carried).

Dr. MCADAM, in a few words, heartily welcomed Dr. Goodall upon his return from England, and thanked him in the name of the Branch for the valuable work he had done while acting as our representative upon the Council of the Association, more particularly for the part he took in obtaining the expulsion of Leith Napier and Ramsay Smith.

Dr. GOODALL, in reply, said:

From the notice paper which I received of this meeting, I did not gather that I should be expected to deliver to you a formal report of the work which, as your representative, it was my privilege and pleasure to do for you in England, on the General Council of the Association. Wherefore I have prepared only some brief, hurried sentences on the subject; and before I proceed, let me say that I deeply appreciate the honour of the position. As your representative—as the representative of the greater Australian branches—my work was made easy for me by the constant courtesy, attention, and energy of the Home officers and officials of the society; from the president of the Association to the errand boy in the office, one found a pattern of politeness that even a Chesterfield could not have condemned. The head office, at the corner of Agar Street and The Strand, is a place where you can obtain any information you may need with regard to any matter connected with our professional work, and there is no sparing of effort in affording or obtaining it for you. I want to tell you that, for it is possibly one of the greatest reasons why a youngster in the profession should at once unite himself with its great controlling body.

We are a long way from the head circulating organ—we are still further from the cerebral centres, away here in the great toe of the Association—but if we have a representative centre in the cerebrum, we may be assured that our troubles here are reflected, reflexed, felt, and acted on there.

Eager as the members of our Parliament are to do all they can for the whole body of their constituents, it is foolish to suppose that they can be kept informed of all their needs by correspondence. You want a voice as well as a pen to do that.

The General Council, to which your representative belongs, is too large and unwieldy to do the more minute and particular work of the Association. Therefore, sub-committees are appointed for their several purposes, and these bodies furnish reports to the General Council for criticism, amendment, or adoption. The General Council has, as a rule, little improvement to effect in the work of its sub-committees, the only crux on which it suffers being the grave question of the *Journal*.

Undoubtedly that is the most important factor in the matter of our relationship with the head centre. The *Journal* can scarcely be said to be the representative organ of the British Medical Association in its fullest sense; and it is the most difficult matter to approach with a hope of success, because, with a conservative body of the most conservative of professions, the reluctance to alter existing conditions is very marked. I must admit that argument has its effect, but you cannot expect the effect to please you unless you control the cause. Wherefore, it seems to me, after a considerable experience of how it is—or is not—done, that the remedy lies in your own hands.

You have here in Australia a fair percentage of membership; I have not the exact numbers, but no doubt they are easily obtainable. Anyway, you are a fifth continent, and we have never had need to blush for our general progress in the interests of our professional work.

Some of our members' names are well-known to many members of the Council at home, and a great many members, who know little of us personally, are aware that there are some branches in Australia—they know it now well enough to consider the interests of those branches too.

But you will never obtain a fair percentage of interest, weight, and power in the British Medical Association until you combine as branches into one limb of the tree, and take sufficient interest in yourselves to force your attention on the great authorities at home. Surely, with the constant recurrence of trips to Europe, we in Australia should be able to have a representative always at the Council table? Why, we have members in England now who might be of service if officially appointed, and with combined Australian pressure the *Journal* would not be such a close borough, and the advantages of membership of the Association for Australian practitioners would be greatly increased.

That's briefly what I want to tell you; and I could have condensed it still further by saying that the Council in London—the General Council—displayed courtesy, hospitality, surprise, ignorance, and an ardent desire to know more of this part of their kingdom.

Don't mistake me. You'll have to hustle if you want to get ahead, and if you hustle as if you mean it, you will get there.

Always have someone to speak for you—someone who knows—someone who is kept informed of your wishes in every matter—someone who can speak with authority for you, and you'll get what you want if your wants are just and justifiable. And that's what I want to say to you as a returned member of the General Council.

Dr. EAKINS then read his paper. (See page 345.)

Dr. NYULASY congratulated Dr. Eakins upon the result of his case, and said that Professor Beyer maintained that the method was useful chiefly in promoting diuresis and diaphoresis.

Dr. MARTELL mentioned a case under his care of miscarriage at sixth month. There was nothing in the uterus to account for the high temperature. He thought he would adopt the saline injection, but personally he preferred the intravenous method, as one could also then let the patient bleed a little. As regards subcutaneous injection, he thought that under the breast was one of the best places. He watched Dr. O'Sullivan put in a pint and a half in one case.

Dr. O'SULLIVAN had used saline injection for several years, especially in hæmorrhagic cases. The Americans were the special advocates for its use in toxic cases—blood-washing was the term they applied to it. It was both tonic and anti-toxic. He considered the sub-

mammary and axillary the best positions. The American school inject, and then wait for two hours. In a bad case, with uræmic symptoms, he had transfused, on three occasions, a pint and a half. In the Bellevue Hospital they did not consider that any condition of the heart or lungs served as a contra-indication.

Dr. CUSCADEN mentioned that he had adopted the saline injections in a case of eclampsia, after he had read Dr. Eakins' paper last year.

Dr. EAKINS, in reply, said he intended, if necessary, to inject a large amount into the peritoneal cavity, with constant irrigation of the rectum.

Dr. SUTHERLAND related the notes of two cases of offensive lochia with high temperature, and in which, after curetting, the temperature came down almost at once.

Dr. NYULASY read notes on a case of craniotomy, followed by induction of premature labour with success. (See page 347.)

Dr. KENNY asked why Cæsarean section was not done in place of craniotomy?

Dr. O'SULLIVAN asked what method of inducing labour was used?

Dr. NYULASY said that the patient was in too low a condition for Cæsarean section; that was an operation when the surgeon chose his own time for its performance. He induced labour by passing a bougie between the membranes.

Dr. O'SULLIVAN showed a very fine specimen of papillomatous growth from the ovary, which he had removed from a patient who had been tapped several times for "ascites." The disease was bilateral, the whole peritoneum from diaphragm to pelvis was infected with small epithelial masses. The abdomen was now quite normal, and there was no return of fluid; the supply of epithelial seed being cut off, no fresh crop appeared. The dendritic masses were extended from exploded cysts, and were capable of infecting all surfaces with which they came in contact.

THE ordinary meeting of the Victorian Branch was held on July 27, at 8 p.m. Dr. McAdam in the chair.

Present: Drs. O'Hara, Lawrence, Meyer, T. H. McGee, R. Weigall, G. Weigall, Cuscaden, Hutton, Nihill, Strong, Scott, Hughes, Halley, Sexton, J. L. Greig, Harricks, Newman, Loughnan, Willis, H. Owen, Stawell, Black, J. A. Sutherland, A. J. Wood, H. Russell. Dr. Plummer was present as a visitor. Dr. Lawrence showed two cases.

Dr. HERMAN LAWRENCE exhibited a case of Infective Angioma (Hutchinson), Syn. Angioma Serpiginosum (Crocker). The disease was first noticed when the patient was about five years old. It started in the form of groups of "cayenne-peppery" looking dilatations of the capillaries of the skin over the abdomen. It had continued to spread at irregular intervals, and now encompassed the whole of the trunk, back and front, also the skin over the penis and scrotum, and was spreading on to the arms and legs. There were numerous dark points, about the size of pins' heads, some larger, which would bleed when picked off. The case closely resembled the cases described by Hutchinson and Jamieson.

Dr. LAWRENCE also exhibited a case of fixed Lupus Erythematosus, capillary variety, in which the disfigurement, of many years standing, had been removed by his method of mince-meating the capillaries, followed by the immediate application of continuous pressure by means of cork pads.

Dr. HUTTON moved that smoking be permitted at the meetings. (Lost.)

Dr. CUSCADEN moved, "That in the opinion of this Branch the fee for notification of infectious diseases be raised from 1s. to 2s. 6d. Seconded by Dr. Hall Owen. (Carried.) By the consent of the proposer the words "and the Council be instructed to bring the matter before the Board of Public Health" were added.

Dr. O'HARA showed the following cases:—

Case 1.—H. H., a lad of 14, from whom he had removed an osteoma about the size of a walnut growing from the body of the sphenoid bone, blocking the nasopharynx, and affecting the deglutition. The method he had adopted to reach the growth was by an osteoplastic excision of the left upper jaw, the jaw being replaced and kept in position by an interdental splint. The healing process was so perfect that hardly any scar now remains on the boy, and he is in perfect health.

Case 2.—J. M., aged 32, from whose brain an hydatid had been removed. (The notes of this case have already appeared in this *Gazette*). The condition of this patient is markedly improved.

G. L., aged 35, was shown to illustrate the advantages of tying the subclavian artery previous to complete excision of the scapula, the dangers of profuse hæmorrhage during the operation being thus minimised.

Case 4.—J. C., aged 27, was shown to illustrate the perfect result that can be obtained from re-section of the elbow joint, where it is possible to preserve the attachments of the triceps, of the biceps, and brachialis anticus intact. He advocated a thorough removal of all the articular surfaces as preferable to any attempt at conservative measures.

Case 5.—H. B., aged 43. In this case a large calcified hydatid cyst had been excised *en masse* from the substance of the right lobe of the liver. Hæmorrhage during the operation gave some trouble, but was eventually checked by sponge pressure, and the cut liver surfaces were brought together with fine silk sutures. The patient made a good recovery.

Mr. O'HARA then read the following notes on a new method of treatment of stricture of the urethra:—

Mr. President and Gentlemen,—You will perhaps think I am a little premature in bringing this method before you, having only treated seven cases. My reasons for doing so are twofold. Firstly, because my success has been so remarkable, and secondly, because I want some of you to give it a trial, so as to bring a method which I have found so applicable in the treatment of this very common, and in many cases intractable disease, before the profession generally. When speaking of stricture of the urethra, I do not refer to the so-called spasmodic or congestive conditions, but to a permanent narrowing of some portion of the canal from organic changes, the result of disease or traumatism, and affecting either the mucous membrane, the sub-mucous tissue, the muscular structures, singly or together. It has invariably been my practice to give gradual dilatation a fair trial before adopting other surgical means, and I think there are very few cases, especially of old gonorrhoeal origin, that will not yield to this method if care and patience be exercised. Strictures resulting from laceration of the urethra are more obstinate, but a fair percentage of them can, I hold, be successfully overcome by gradual dilatation. If, as is claimed for it, the pressure of a catheter or sound promotes the absorption of the fibrous tissue resulting from inflammatory products, anything that can aid in that absorptive process must necessarily become an important factor in the treatment. In December last, whilst treating a case of stricture situated at the junction of the spongy and membranous portions of the urethra, the result of a urethritis of two years ago in a man 35 years of age, I found great difficulty in introducing a No. 1 bougie.

After four sittings, at intervals of three days, I was able, with some difficulty, to pass a No. 5 bougie. It struck me that I might possibly help the absorptive process by employing massage over the seat of stricture, knowing the effect of massage on ordinary scar tissue. I therefore introduced a steel sound, No. 5, through the constriction, and, having placed the patient in the lithotomy position, gently applied effleurage and petrissage movements, at the same time stretching the urethra over the sound. After a little manipulation I thought I could feel the strictured urethra moving over the sound, that had been tightly gripped by it. I therefore withdrew No. 5, and, to my surprise, passed Nos. 6 and 7 fairly easy. As he complained of slight tenderness, I did not persevere further on this occasion. After a lapse of three days, I introduced a No. 6 sound, and having gently applied massage for about ten minutes I passed Nos. 7, 8, and 9 without difficulty. Three days later the same treatment was adopted, and a No. 10 silver catheter (English size) was passed also without difficulty. Never at any time was there a trace of hæmorrhage, and the slight soreness complained of during the first massage was avoided on subsequent occasions by the use of cocainised vaseline applied to the instruments. I have seen this patient quite recently, and tested the patency of the urethra, which is quite satisfactory, admitting the passage of a No. 10 catheter. A similar result has followed this treatment in five subsequent cases, and I will not occupy your time with a recital of the data connected with them. The seventh case I have now under treatment. He is an elderly man (62 years) with an enlarged prostate and two strictures, one in the penile portion of the urethra, $2\frac{1}{4}$ inches from the meatus, and the other in the bulbous portion. He has had four applications of massage to the anterior stricture, through which a No. 3 sound could previously with difficulty be passed, and this morning I introduced with ease a No. 10 sound. I have very little doubt but that the posterior condition will yield to the treatment just as easily. I have not, up to the present, had an opportunity of treating a case of traumatic stricture, but I see no reason why the result should not be as satisfactory, though perhaps the process of absorption would be a little more tedious. I may here state that in all the cases mentioned the bladder condition was normal, the urine being found healthy.

Dr. MEYER stated that he watched Dr. O'Hara remove the calcified hydatid, and when at the end of the operation he brought the liver up to the surface by passing a suture through the gall bladder, he admired the ingenuity of the proceeding as much as its audacity.

Drs. NICHILL, CUSCADEN, HARRICKS, and HUGHES also spoke on the cases.

Dr. STAWELL consented to open a discussion on the treatment of broncho-pneumonia.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

CANTERBURY SECTION.

NEW ZEALAND BRANCH BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting was held in the Caledonian Society's Rooms on May 12th, 1898.

Dr. CAMPBELL stated that, having found his first letter, written early in the year, had miscarried, he had again forwarded a letter to the Canterbury Law Society, offering one guinea per quarter as rent for the library. No answer had been received.

The following sub-committees were appointed, with definition of their several duties, it being understood that each chairman would select his own colleagues.

1. *Finances*.—Chairman, Dr. Manning (hon. treasurer). Duties: To prepare estimates for the year, to attend to all matters connected with finance, and give special consideration to the advisability of levying special subscriptions.
2. *Parliamentary and Ethical*.—Chairman, Dr. Campbell (vice-president). Duties: To consider all questions of an ethical nature, to preserve newspaper cuttings of interest, and to watch over matters of unqualified men, and of legislation where affecting the medical profession, as well as the registration of medical practitioners.
3. *Public Health*.—Chairman, Dr. Fairman (president). Duties: The consideration of all matters relating to public health.

Dr. CAMPBELL was appointed delegate to attend the Council meeting.

A meeting was held on June 9th. Dr. Campbell gave a detailed report of the proceedings of the Council and stated that the Law Society had declined the offer of one guinea for rent of the library. It was agreed to remove the books. Dr. Campbell offered a room in his own house if the Section would provide movable shelving which he estimated at £2. Dr. Manning was associated with Dr. Campbell as a sub-committee to consider the matter of the library in all its bearings and especially with a view to cost. A draft circular, outlining the scope of the proposed Circulating Library, was submitted and approved.

A letter was read from Dr. Jennings calling attention to the fact that medical men were now being interviewed with respect to their portraits and biographies appearing in the "N.Z. Encyclopædia," and protesting against such as a breach of etiquette.

A number of those present agreed with Dr. Jennings, and gave their several experiences of this interviewing. After some discussion it was decided, on the motion of Dr. Thomas, to call a special meeting to consider the matter, each member being urgently requested to attend or forward a written expression of his opinion.

A special meeting, convened by circular, was held on June 23rd to consider the question of the insertion of medical biographies in the "N.Z. Encyclopædia." A very full discussion ensued, and the matter was viewed from all points, and on a vote being taken it was found that forty-four were opposed to the insertion, while three favoured it on modified grounds. In view of the practically unanimous decision, the chairman, Dr. Campbell, then moved, "That the feeling of the members of this section being strongly opposed to the publication of their autobiographies in the "N.Z. Encyclopædia," it be a recommendation from this Section that members refuse all information for publication except, names, addresses, and qualifications." This was unanimously carried amid applause. The hon. secretary was instructed to forward the resolution and details of voting to each member, the resolution only to every medical practitioner in Canterbury, and at the same time to communicate with the secretaries of other Sections, asking them to support the action taken.

The ordinary monthly meeting was held on July 14th.

The Library Committee reported that the medical works had been removed from the Law Society's rooms, and were now stored at Dr. Campbell's residence. The

necessary shelving had been erected for less than £6, the amount authorised by the Committee.

The Hon. Treasurer laid on the table a balance sheet of the expenses of Council meeting, showing a charge of 1s. 2d. per member.

Dr. FENWICK read for Dr. Fairman, an interesting note on "Decapitation of a Fœtus" by means of a fishing line. (To appear in a future issue). During the discussion that followed instances of catheterism in the female by means of a straw, probe case, and quill were given.

Dr. SYMES gave a rough clinical test for strychnine, and exhibited the stomach and heart of a female suicide who had taken "rough on rats." He also read to the meeting some interesting notes on this case, and another also of strychnine poisoning. Special stress was laid on "the impending fear of death" where strychnine has been taken in poisonous doses, and this was confirmed by Dr. Fenwick, who gave a special warning as to the danger of taking doses from the bottom of a large bottle of Easton's syrup.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Branch was held at the Royal Society's room on Friday, 29th July, 1898, Dr. Thring, Vice-President, in the chair. Present:—Drs. G. L. O'Neill, Sawkins, Gledden, Fiaschi, Sinclair, F. H. Quaise, Crago, Rennie, Lillie, J. A. Dick, Bowker, Arthur, Binney, Abbott, O'Hara, Martin, F. W. Hall, G. A. Marshall, Macdonald Gill, Collins, Worrall, Jamieson, Wilkinson, Clarence Read, Clubbe, MacCulloch, and Knaggs.

The minutes of the previous meeting were read and confirmed.

An apology for the absence of the President (Dr. Chisholm) owing to ill-health was received.

The election of the following new members was announced:—Dr. Sinclair Gillies, Dr. Charles MacLaurin, and Dr. R. A. Robinson.

The following gentlemen were nominated for election:—Drs. J. K. Freyer, H. G. S. Warren, R. M. Farrell, A. Pring, and H. Stoker.

The CHAIRMAN then called upon Dr. Gregory O'Neill to open a discussion on the duties of medical men in reporting deaths to the coroner.

Dr. O'NEILL said he approached this important subject with some diffidence as he was quite ignorant as to what a medical man's duty in reporting cases to the coroner really was. Of course he quite understood the matter with reference to sudden deaths, but in suspicious cases what was the medical man's duty. Two very high authorities in medical jurisprudence (Professors MacLagan and Littlejohn) clearly laid down that it was not the duty of the medical man to act as an informer and detective. In the celebrated case of *Kitson v. Playfair*, the Judge (Sir Henry Hawkins) laid down the rule that anything imparted in confidence by the patient to the medical attendant should be held sacred and not divulged. Yet we find a medical man in this city rated by the coroner for not having made known certain statements made to him by his patient. Some light should be thrown on this subject by those who have the knowledge, and in the discussion on this matter nothing but good could arise, as he (Dr. O'Neill) felt sure that very few, if any, medical men knew what was expected of them in such cases. A medical man had a duty to society as well as to his patient, and, while respecting the confidences of a client, might find himself in the

unpleasant position of an accessory after a criminal act and liable to pains and penalties. He could not find any literature on the subject. In America and France some attempt had been made to deal with it, and he sincerely hoped that some effort would be made in this colony to make it clear as to what the medical man's duty really was. The New York code made provision in the following terms for the protection of the medical profession: "No person qualified to practise medicine and surgery shall divulge any statement made to him by a patient in his professional capacity."

Dr. SAWKINS said he had frequently been placed in a position of uncertainty as to whether a particular case should, or should not, be reported. However, in cases of criminal abortion he had never hesitated to report them. He did not consider that he was thereby acting the part of a detective, or that he was divulging any professional secret that could be respected. On the contrary, he considered that he was merely doing his duty to the public, and that to conceal such cases was to become a participator in the crime of murder—certainly as regards the child, and possibly as regards the mother. There was in Sydney a large number of professional abortionists who apparently thrived on this trade, and it was the duty of every medical man *not* to act as "cover" by suppressing these cases of abortion which came to his knowledge. He would like to draw attention to the unfair position in which anaesthetists were placed by the present regulations for reporting cases of death under anaesthetic. Under the existing condition of affairs, if by any misadventure, such as might occur to the most experienced, a patient dies while an anaesthetic is being administered, the death is reported to the coroner, and the anaesthetist was practically, if not specifically, placed on his trial charged with having caused the patient's death. A patient, after due explanation of the risks attending operation, may place his life in the hands of a surgeon, and he did not think that the surgeon should be arraigned in the event of a fatal issue. But he certainly thought similar confidence should be placed in the anaesthetist. Moreover, the knowledge of the notoriety which would result should death occur while chloroform was being given, was apt to interfere with the administration. The anaesthetist became frightened and gave too little, or flurried and gave too much—both were dangerous possibilities. He thought that if this discussion resulted only in the lightening of the undue responsibility which at present rested on the shoulders of the anaesthetist it would have served a very useful purpose.

Dr. ARTHUR said he agreed with Dr. Sawkins with regard to dealing with cases of criminal abortion. In not reporting cases of criminal abortion, medical men made themselves almost accomplices in the deed; certainly there was no intention in these cases to commit murder, but the fact remained that by not reporting such cases a medical man took upon himself a very grave responsibility. He (Dr. Arthur) had a case lately where he thought it necessary to take some action so that a miscarriage of justice should not take place.

Dr. BOWKER was pleased that the discussion on this very important question had been placed upon the business paper. He did not think it the business of the medical man to report or divulge what had been told him by a patient. It was quite a different matter when a man was placed in a witness-box; he was compelled then to answer any question. If a medical man of his own free will divulged what was imparted to him in confidence by the patient, then all confidence would be lost between the patient and the practitioner.

In Dr. Sawkins' suggestion with reference to the extra responsibility of the anaesthetist, he (Dr. Bowker) thought the responsibility of the surgeon and anaesthetist was perfectly equal. In some cases where inquests were held it appeared very curious. He remembered two cases where he was called upon by the coroner to view bodies, and in both cases he declined to give certificates of death; yet they were buried without inquests. Yet, in a case where a patient died during an operation at the Sydney Hospital, where there were a large number of medical men present and everyone knew what was the real cause of death, an inquest was held and the newspapers commented very unfairly upon the case, and paragraphs appeared with large headings, "Another death under chloroform, etc." There was no objection to the inquest, but there was certainly an objection to the unfair press criticism.

Dr. BINNEY agreed with Dr. Bowker that a medical man should not divulge what a patient communicates to him. Where, however, a patient dies, the medical man should at once report the death to the coroner. He remembered a case where a woman made a confidential statement to a medical man, and the medical man immediately sent the woman on in a cab to the Government Medical Officer, who stated very clearly that the medical man had overstepped his path of duty. He had often been in the position mentioned by Dr. Sawkins, and was glad to hear Dr. Bowker say that surgeons were quite prepared to take equal responsibility with the anaesthetists.

Dr. GLEDDEN said that a coroner was defined as "an officer appointed by the Crown, whose duty is to enquire into the causes of accidental or suspicious deaths." From the point of view of the public he was looked upon as an official who safeguarded their interests, from that of the profession as taking from their shoulders the responsibility of certifying as to the cause of death in certain cases. He did not consider it the duty of a medical man attending a patient suffering from the effects of an abortion criminally induced to inform the police. It was the patient's secret, and was imparted to the doctor only to aid him in his efforts to restore her to health. Mr. Justice Hawkins laid this down very forcibly in his summing up in "*Kitson v. Playfair*," but evidently only referred to cases when death does not ensue. Should the patient die, it is the duty of the medical man to inform the authorities, and by doing so he protects himself.

Dr. QUATFE said Dr. Arthur had raised a very important question as to the responsibility which a medical man took upon himself in not reporting these cases to the coroner. Were medical men only dealing with the mother in such cases? Were they to condone, so to speak, offences against the law of the country? It was certainly a most serious responsibility. From the moment of conception, the doing away with the foetus was practically murder. Whether it was right or whether it was wrong, there could be no question that the medical man was party to the crime in not reporting it. Of course there were difficulties on every side; one time a patient would state something, and immediately after contradict it. However, in cases of death, it should at once be reported to the coroner, then the responsibility was placed upon the proper authority. The terrible state of affairs at the present time with reference to criminal abortion deserved special attention, and medical men should not be parties to such matters.

Dr. RENNIE said he had waited to hear the opinions of the medical men present on the very important question opened up by Dr. O'Neill. With reference to Sir

Henry Hawkins' remarks on the Kitson case, already alluded to, he quoted from the legal opinion on Professional Privilege given by Dr. Todd. (See *A.M.G.* June, 1897, p. 291.) That opinion was definite enough as regards the duty of the medical man to his patient. In France, so strict is the rule of professional secrecy, that the medical man was not allowed to state the actual cause of death upon the death certificate, but merely to state "natural causes." In the case mentioned by Dr. Bowker, he (Dr. Rennie) would have dispensed with an inquest. There could be no question that, under the present arrangements, in cases of death under anæsthetics, the anæsthetist was before the coroner as a person suspected of having caused the death of deceased. In the case of deaths of infants from marasmus, etc., under the Children's Protection Act the inspector had power to demand an inquest in any or every case of death of boarded-out infants. There was no law in the colony which compelled a medical man to give or withhold a death certificate. The Registrar had no power to refuse death certificates issued by anyone, whether a qualified practitioner or not, and was bound to issue an order for burial; he could, however, as a private person, report any case to the coroner. The law only compelled friends to register the death within 30 days. Without doubt, an alteration of the law was necessary, so that the present lax system could be altered. In his opinion, in the present unsatisfactory state of things, definite legislation was urgently required, so that medical men might know exactly their position and their duties in relation to the coroner, and certainly legislation was urgently needed to enable registrars to accept certificates of death from duly qualified and registered medical men *only*. In all cases of deaths under chloroform inquests might not be necessary, and in deaths where there were no suspicious circumstances inquests could be dispensed with. In giving information regarding any case he would advise medical men to remember that such information should be given to the police in the first instance, and not to the coroner. That procedure would save time and trouble to all concerned. So that some good might arise from the discussion, he would move "That the Council be empowered to bring this matter prominently before the Premier, so that some definite legislation may be proceeded with as soon as possible, with a view to dealing with the question of registration of deaths, and the duty of the medical men in reporting deaths to the coroner." Seconded by Dr. O'Neill, and carried.

Dr. THRING said: Dr. O'Neill had done wisely in opening a discussion on a subject of so much importance to the profession and the general public. In spite of his disclaimer that he knew nothing about the matter, he showed that he fully recognised the present unsatisfactory state of the law in regard to the certification of deaths. He (Dr. Thring) was entirely in sympathy with Dr. Bowker when he made his protest against the present practice of the coroner in holding an inquest on every case in which death occurred during operation, or within a few hours. In the majority of these cases the patients were *in extremis*; they were being given the one remaining chance of recovery which operative interference afforded. Both the friends and the patient—when that was possible—were duly notified of the risks, and it could only be assumed that they were prepared to take them. If the case terminated fatally the surgeon and the anæsthetist were practically put upon their trial before the coroner and his jury, with the result that, as a rule, no good was gained for anyone, and the general

public as a body was made still more nervous, by the publication of a newspaper heading of "Another death under chloroform." As a side issue this opened up the question of the selection of the anæsthetic, and, more important still, of the anæsthetist, for it was no use blinding one's self to the fact that many men were called upon to administer anæsthetics who were not properly trained, and who were, in fact, incompetent. The question had been raised by several gentlemen, as to the obligation under which a medical man lay, to report to the police all cases which came under their care in which there was evidence of illegal operation done with the intention of bringing on abortion. One medical man present had stated that his practice was to report any case which terminated fatally, but not to report others in which the final result was favourable as to the patient's life. Such a position hardly seemed logical, for surely the operation was equally illegal in any case. Personally he (Dr. Thring) must admit that with regard to certification of deaths, that his practice had simply been to give a certificate in all cases in which he could truly say that death resulted from "natural causes," and in other cases to refuse a certificate, and to write a short statement of the case for the information of the coroner, thereby shifting responsibility. Dr. Rennie's remarks were valuable and to the point. After hearing them, it certainly seemed wise that those in authority should be asked to place the question of certification of death upon a more defined basis. One other matter also was of great importance, not only to the profession, but to the general public, viz., that the coroner should always have a thorough medical training. That this was an essential point was being rapidly recognised in England, and they were fortunate in having such a man as Dr. Rennie for their deputy-coroner.

Dr. O'NEILL, in reply, said discussions of this character should take place frequently. All required education on ethical subjects. He would suggest that an addition be made to the resolution, calling attention to the obscene advertisements appearing in the daily papers. He thanked the members for the patient hearing given to him, and sincerely hoped that some practical good would arise from the discussion.

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL WOMEN'S ASSOCIATION, MELBOURNE.

DURING the year 1897 meetings of the Society have been held monthly, when papers were read on the following subjects:—

"Ectopic Gestation," by Dr. Amy Castilla; "The Use of the Ophthalmoscope and Laryngoscope by the General Practitioner," by Dr. Gertrude Halley; "Diphtheria," by Dr. Mary Stone; "A Case of Deferred Abortion," by Dr. Janet L. Greig; "Acute Alcoholism," by Dr. Mary Fletcher. Notes on cases of "Lesions of the Spinal Cord," "Stricture of the Œsophagus," "Tubercle," and "Extra-uterine Foetation," were read and commented on by Misses Plummer, Ellis, and Goode. Reports on cases of gynecological interest were read by Dr. Clara Stone, Dr. Amy Castilla, Dr. Gertrude Halley, and Dr. Mary Stone. The Secretary is Dr. Jane S. Greig.

At the annual meeting, held on March 25th, 1898, the following office-bearers were elected:—President, Dr. Gertrude Halley; Secretary, Dr. Jane S. Greig; Members of Committee, Dr. Mary Stone, Misses Ellis and Snow.

ROYAL SOCIETY OF NEW SOUTH WALES, MEDICAL SECTION.

ANNUAL MEETING.

The annual meeting of the Section was held at the Royal Society's House, 5 Elizabeth Street North, at 8 p.m. on May 20th, 1898.

Dr. J. Ashburton Thompson, Chairman of the Section, presided.

The election of office-bearers took place, with the following result:—Chairman, Dr. G. E. Rennie; Joint Hon. Secretaries, Dr. J. Adam Dick and Dr. F. Tidswell; Committee, Dr. J. Ashburton Thompson, Dr. G. Lane Mullins, Dr. Sydney Jamieson, Dr. F. H. Quaife. It was decided to hold meetings of the Section on the third Friday of the month during the session, provided sufficient material were forthcoming. The office-bearers for the past year were thanked for their services.

ORDINARY MEETING.

At the close of the above meeting, an ordinary meeting of the Section was held. In the absence of the Chairman (Dr. G. E. Rennie), the ex-Chairman (Dr. J. Ashburton Thompson) presided. Dr. J. Adam Dick exhibited an apparatus, of local manufacture, for the production of Formic Aldehyde Gas, for the disinfection of dwellings, etc. He explained the apparatus and the application of the gas as a disinfectant. Drs. F. Tidswell, Sydney Jamieson, F. H. Quaife, R. J. Pope, and G. Lane Mullins discussed the subject of Formic Aldehyde and its preparations, first as antiseptics, and then as disinfectants. (The apparatus was obtained from Lichtner & Co.) The meeting terminated at 10 p.m.

ROYAL SOCIETY OF TASMANIA, MEDICAL SECTION.

The usual monthly meeting of the Medical Section was held on the 6th July, when the following were present:—Drs. Bright (President), Clarke, Wolfhagen, Jamieson, Scott, Giblin, Alsop, Anderson, Drake, Spark, Ireland, and Sprott.

The minutes of last meeting were read and confirmed. The President welcomed Drs. Anderson and Drake as members of the Section.

After some routine business, the President showed a case of a man who had been run over by a waggon containing about five tons of flour, with the result that both bones of both legs were broken just above the ankles. As the fractures were compound, and the bones comminuted, it was at first thought amputation was advisable, but it was decided to try and save the limbs if possible. He (Dr. Bright) was pleased to say that, after four months treatment, the man had made an excellent recovery, and had now a good pair of legs.

Several members congratulated Dr. Bright on the result of his treatment, Dr. Spark remarking that as many as 18 pieces of dead bone were discharged from time to time from one of the legs.

Dr. WOLFHAGEN showed a case where he performed Fitzgerald's operation for talipes, and the result was a good one. He then read notes "On Some Unusual Complications after Laparotomy." (To appear in a future issue.)

Dr. DRAKE then read "Notes of Three Cases of Appendicitis" which he had treated in the Launceston Hospital by surgical measures.

After some discussion on the Vaccination Bill now before Parliament, the meeting closed with a vote of thanks to those who had contributed papers.

DR. DE LAMBERT SUBSCRIPTION FUND.

THE friends of Dr. de Lambert will be sorry to hear that he recently had the misfortune to contract a serious attack of septic cellulitis of the hand from a scratch received when opening an abscess. It has, unfortunately, been necessary to remove one of his fingers. As Dr. de Lambert is entirely dependent on his immediate professional earnings, his painful position just now, during his enforced idleness, has suggested to some of his friends that it would be a great help and rest to his mind to know that he was not entirely penniless, hence a subscription list has been opened on his behalf. Intending subscribers are asked to send their contributions to the Editor of the *Australasian Medical Gazette*, 121 Bathurst Street, Sydney.

The following amounts have already been received:—

R. Scot Skirving	...	...	£1	1	0
Samuel T. Knaggs	...	...	1	1	0
W. Odillo Maher	...	...	1	1	0
A. Watson Munro	...	...	1	1	0
D. Doolan (Yass)	...	...	2	2	0
H. J. H. Scott (Scone)	...	...	1	1	6
Gregory L. O'Neill	...	...	1	1	0
Louis T. Laure	...	...	1	1	0
V. Marano	...	...	0	10	6
T. Fiaschi	...	...	1	1	0
Joseph Foreman	...	...	1	1	0
Wm. Chisholm	...	...	1	1	0
A. J. Brady	...	...	1	1	0
Cotton d'Englesqueville	...	...	1	1	0
L. Bruck	...	...	1	0	0
Alfred Burne	...	...	1	1	0
Reuter Roth	...	...	1	1	0
W. E. Warren	...	...	1	1	0
W. H. Crago	...	...	1	1	0
E. Fairfax Ross	...	...	1	1	0
E. J. Jenkins	...	...	1	1	0
A. A. Cohen	...	...	1	0	0
E. Rougier	...	...	1	1	0

NEW SOUTH WALES MEDICAL BENEVOLENT FUND.

SINCE the last notice the following subscriptions have been received:—

(a) Subscribers of £1 for four years:—Drs. A. FitzPatrick, A. Foster, T. E. Franklin, J. W. Kennedy, A. Watson Munro, C. K. M., W. Pierce, G. L. O'Neill.

(b) Subscribers of 10s. for two years:—Drs. W. H. Coutie, A. E. Mills.

(c) Subscribers of 5s. for one year only:—Drs. T. A. Green, W. M. Helsham, M. Lyden, G. A. Marshall, S. Stephens, W. H. Tomlins, S. Tresidder.

All subscriptions should be sent to the hon. secretary, Dr. F. W. HALL, 18 College Street, Sydney.

Among the many useful contrivances invented for the benefit of cyclists is one which we think especially useful to doctors who cycle. The accessory we refer to is called the "Ariel Luggage Carrier." This carrier consists of two rubber bands, with which, by means of a hook and a loop, a parcel or waterproof can be instantly attached or detached to the handle-bar or an umbrella fixed to the frame. We have also seen these bands used in place of trouser clips. When not in use, the "Ariel Carriers" may be slipped into the tool-bag, and occupy a very small space, and are always ready for use. The Austral Cycle Agency are selling these carriers now at 1s. per pair (1d. extra for postage). The addresses of their depots will be found on page viii. in this issue.

MEDICAL SOCIETY OF QUEENSLAND.

THE 139th general meeting was held on August 2nd, 1898, in the Society's rooms.

Present: Dr. Wheeler (President), Drs. Love, Dennis, Gibson, Hill, Carvoso, Byrne, and Turner.

The PRESIDENT read for Dr. GARDE, of Maryborough, a paper on a "Case of Splenectomy for Hypertrophy of Spleen." (To appear in a future issue.)

Dr. LOVE showed a series of skiagrams, and made some interesting observations on the cases illustrated. The first cases shown were those of needle fragments in the hand or foot. For these he found a distance of six to eight inches of the focus tube gave the best definition. In removing them he always used infiltration anaesthesia. There should be no "raking around," but the incision should be continued straight down, until the bone was reached, if necessary. The remaining cases were examples of fractures. He considered it almost a duty for the surgeon to make sure of the accuracy of apposition in all cases where much swelling existed, by taking a skiagram after the fracture had been set up in splints.

PHARMACY NOTES.

AN IDEAL FORM OF MEDICATION.

IN point of length (state Messrs. Parke, Davis and Co. in *Pharmaceutical Notes*), our experience in the making of fluid extracts spans an entire generation of human life. In point of diversity, a glance at our price list, with its 560 fluid extracts, will tell its own tale of difficulties encountered and overcome, of investigations prosecuted, of problems solved and improvements effected, of laborious and dear-bought but profitable experience, of honourable reputation achieved.

OUR CRUDE DRUG DEPARTMENT in New York is the most extensive crude drug house in the United States, and our facilities for procuring the choicest parcels of foreign and indigenous drugs, whether for pressing or manufacture, are well-nigh perfect. We are also the heaviest consumers in the country. The gauntlet which our purchasers must run, in the way of repeated examination, identification, chemical assay, physiological test on animals, and cautious garbling, renders utterly impossible the use of unfit material in manufacture. Good drugs are required in order to obtain high-grade pharmaceutical preparations.

Let us now suppose that the stock of a given fluid extract is running low. It must be replenished. A bale or sack of the drug is delivered to the milling department. After examination by the head miller, a sample is sent to one of our chemists; by him it is again examined, identified, and returned to the miller. The drug, thus approved, is now carefully fed into the mill (every suspicious particle being at the same time carefully separated) and reduced to that degree of fineness which is best suited to complete exhaustion. The ground drug is then weighed, deposited in a container, and a fair sample is carefully preserved.

METHODS OF EXTRACTION.—*The application of heat is to be avoided in the manufacture of fluid extracts*, because the purpose of these preparations is to present in convenient and stable form, and in their natural combinations, the desirable compounds which give to each

drug its peculiar character. Heating always affects drug constituents to a certain extent, and most disastrously those which are known as glucosides, essential oils and delicate alkaloids; for this reason we have adopted for all our important fluids the process of cold repercolation, rather than that prescribed by the U.S.P., 1890.

SELECTION OF MENSTRUUM.—This forms the most difficult, important, and vital problem of manufacture. What is that ideal menstruum which, while completely exhausting the treated drug, subsequently holds the medicinal constituents in permanent solution? Varying, of course, with each drug, the answer to this question is by no means given with uniform correctness in the text-books. Even the Pharmacopoeia sometimes fails to indicate the menstruum best adapted to large operations. Not seldom, our assiduous, unremitting experiments have led us to better results than the official menstruum can possibly yield. In all such cases, following the spirit rather than the letter of the U.S.P., we never hesitate to adopt that solvent which yields the most active preparation.

UNIFORMITY PRESERVED.—Our records of the working formulas bear in writing every detail of manufacture from beginning to end. Hence successive parcels of the same drug are sure to be treated in the identical manner, and to exhibit an unvarying uniformity, physically and medicinally, year in and year out. This is highly important. *The only valid excuse for changing a formula is the improvement of the product.*

NO ADVERTISING MYTH.—The assaying of our fluid extracts, with adjustment to uniform standards, is rigidly executed, and not the slightest deviation is permitted from the standards adopted. *Not even a quarter of one per cent. active principle, above or below the established limits.*

TESTING EXTRAORDINARY.—We have now one of the best equipped Physiological Laboratories in America, and to this department we submit from time to time drugs and fluids, in order to corroborate the chemical evidence already obtained as to their activity. Certain drugs cannot be subjected to chemical assay, because of the ease with which their active bodies decompose. The four most prominent examples of this class are Ergot, Cannabis Indica, Digitalis, and Strophanthus—all powerful remedies, and often applied in emergencies, and in small doses. Unfortunately, they vary greatly in activity, and under ordinary circumstances the pharmacist or manufacturing chemist is unable to determine their true medicinal value. In purchasing these drugs, we procure samples, which are tested physiologically, and obtain supplies on this basis; after the fluids are manufactured, samples are submitted to the expert in charge, who also tests them by administering them to animals, and is thereby enabled to decide if the fluids are properly active. *We have reason to believe that we are the only manufacturers in America or distributors in Australia who can offer such a guarantee as to the activity of preparations of Ergot, Cannabis Indica, Digitalis, and Strophanthus.* We also submit samples of all fluid extracts for comparison with "standard samples" in order to insure the presence of the proper taste, odour, colour, etc.

THE GROWING POPULARITY OF FLUID EXTRACTS.—This is manifested in the immense increase in the consumption of the fluid extracts in England, Canada, Germany, France, Australia, and other civilized countries. In the U.S.P. of 1860 seven fluid extracts were

enumerated. During the next four decades this number swelled to; 25, 46, 79 (in 1890), to 88 and up to the present time 560. That they are steadily superseding the ancient tinctures admits of no doubt. Important official tinctures vary from two-thirds of a gramme to $\frac{1}{374}$ of a gramme to the cubic centimeter. Several, however, are from one-sixth to one-twelfth of a gramme to the cubic centimeter; therefore the fluid extracts of the same drugs, which are of uniform strength, are from six to twelve times stronger than the tinctures, which, although they cost from one-third to one-half of what the fluid extracts cost, occupy six to twelve times the space, and weigh six to twelve times as much, and the dose is six to twelve times as large.

DR. GILES'S ADDRESS AND THE ADELAIDE HOSPITAL. (See page 323.)

(To the Editor of the Australasian Medical Gazette.)

SIR,—Your publication of Dr. Giles's address necessitates some few words from me in explanation, seeing that I am one of the "individuals" attacked by him. To begin with, Dr. Giles overlooks the main object of the Association, which is for the advancement of our professional knowledge. Presumably we meet there on a common basis, and we should be able to treat each other with the usual courtesies of life, discuss dispassionately the topics before us, and go our several ways. Although Dr. Giles and myself are not able to quite see eye to eye on certain points I am quite willing to respect his opinions, but I demand the same consideration from him for myself. Although to Dr. Giles and a few others my presence at some of the meetings seems to have given umbrage, not a few of the members have been glad to see me taking the same interest in the scientific part of the work that I have done for so many years past. The Hospital question has unfortunately been marked by mistakes made by every one concerned. I do not wish to go into this matter further than this—viz., the whole trouble has been caused by the institution being under political control. It being impossible to bring back affairs to the *status quo ante*, evidently the best course would be to try and begin a constructive policy instead of the destructive one which the then proposed enquiry could only greatly assist. With this end in view I tried to get a programme adopted, of which the following were the chief points:—

1. That so many mistakes had been made all round it was time for a give-and-take policy to be adopted.
2. Certain gentlemen felt they could not go back to the Hospital on conscientious grounds; that such being the case the Government, public, and profession alike would honour them for the position they adopted.
3. That applications should be invited for a new honorary staff, all medical men who wished to do so to feel themselves quite at liberty to apply, and that all reasonable preference should be given to members of the old honorary staff who applied.
4. That with a view of preventing any repetition of the causes of the trouble the Hospital Act should be amended to this effect—that at least three members of the Board should be elected annually by subscribers, the voting power of subscribers to be *pro rata* with the subscription, and the number of representatives to be increased as the total amount increased.

There were some other clauses of a less important character. Although I discussed this with many well-known members of the profession and others, I deeply regret now that I did not lay it before the profession as a whole. Possibly they might have taken it up more warmly than those I spoke to did. It was not till long after this that I accepted a position on the present staff, and then before sending in an application I wrote to the President of the year stating my intention, and that I hoped it would not be misunderstood as being in any way antagonistic to the late staff, and that it would not lead to any rupture of social or professional relations. To this I received a letter thanking me for my courtesy in informing the Council of my intentions. I was naturally not a little astonished when, some months after, I found that an attempt was to be made to expel me from the Association. I leave the public and the profession generally to appreciate the absurdity of the position. Finally, no one can have a higher appreciation of the work done by the late honorary staff than myself. The public and the profession alike are indebted to them for making the good use of the opportunities they did. Inasmuch as it has long been impossible for them to go back as a whole it is, I think, time to bury the hatchet; and I would appeal to them to try and assist, rather than discount, the efforts of those who have taken the positions which they themselves declined to fill again.

I am, Sir, etc.,

LEONARD W. BICKLE.

EYE SPECIALISTS TO LODGES.

THE Council of the New South Wales Branch of the British Medical Association, having had its attention drawn to an advertisement calling for applications from eye specialists to attend the members of a suburban Lodge, decided to elicit the opinion of the eye specialists practising in Sydney on the subject. The following reply was received, and was considered at a meeting of the Council held on August 4th inst., when a resolution was unanimously passed approving of the decision arrived at by the specialists, and ordering that the communication be printed in the *Australasian Medical Gazette*:—

20 College Street, Sydney,

July 20th, 1898.

To the Hon. Secretary, British Medical Association,
New South Wales Branch.

SIR,—At a meeting of the undersigned medical men practising as specialists in the diseases of the eye, it was unanimously resolved: "That the Council of the British Medical Association should condemn the appointment of eye specialists by Lodges, and that the Council be requested to discountenance the introduction of the principle of club practice in connection with special work."

THOMAS EVANS,	THOS. S. KIRKLAND,
H. GUY S. WARREN,	P. J. KENNA,
ROBERT HY. JONES,	ROLAND POPE,
F. ANTILL POCKLEY,	GATEWARD C. DAVIS,
GORDON MACLEOD,	W. ODILLO MAHER,
S. H. HUGHES,	

MESSES. F. STEARNS & Co., in our advertising columns, page xxv., draw attention to their manner of preparing *fluid extracts*, and invite correspondence on the subject. Many of their preparations are already favourably known in Australia, especially their *Kassagra* and Wine of Cod Liver Oil with Peptonate of Iron.

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

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THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
M. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH AUGUST, 1898.

EDITORIALS.

THE HOSPITAL SATURDAY IN SYDNEY.

WE question very much if the Hospital Saturday is a blessing to the charitable institutions for the succour of the maimed, diseased, or sick of the Sydney poor. One Saturday every year is set apart for the collection of monies by charitably disposed ladies of all ages; these all parade the streets from early morning until late at night in the search of contributions for these public charities. We give all credit to

these large-hearted and indefatigable ladies for their brave and energetic endeavours on behalf of that pre-eminent attribute "charity." They voluntarily solicit subscriptions from all sorts and conditions of mankind, and render themselves liable to submit indiscriminately to good-natured sympathy, careless chaffing, rebuff, and sometimes even to insult from rude and non-sympathetic members of the public.

We, however, have grave doubts regarding the utility of this proceeding as a means of contributing to the welfare of the hospitals in whose behalf it may have been made. There are numerous persons in every community who believe in the scriptural adage about "casting bread upon the waters," which they willingly do, in crumbs, and after many days expect it to return in huge slices buttered on both sides. What we wish to indicate is, that while "Hospital Saturday" may serve to raise contributions for various Sydney charities, it also successfully advertises to those who are only too ready to take advantage of the information, that hospital assistance will be afforded to all and every one that can be clever enough to avail themselves of such assistance by complying with certain conditions. Thus every individual of this class who puts his penny or threepence into a collecting box pats himself upon the back and feels that he has a claim in the future upon any one of the charities which participates in his munificence.

It appears that the two principal sources from which the Hospital Saturday collections are augmented arise from the street canvass for donations and regular weekly contributions from the employees of some large business houses. The money raised by this latter way is called the "Industrial fund." It is with regard to this fund that some trouble of "the bread upon the waters," principle arises. According to the last annual report of the Hospital Saturday Fund Committee, this "Industrial fund" has £1,033 to its credit, that is about one-third the whole amount raised from both sources. The subscribers are persons in receipt of small salaries or wages, and they maintain that in making a weekly contribution toward hospital maintenance they are entitled to gratuitous hospital relief when required, and are supported in their demand by the committee of the "Hospital Saturday Fund," which adopted the following resolution:—"That grants made to any hospital should be conditional on any certified subscriber to this fund who is recommended for admission by the honorary secretary (or other honorary officer) being received and treated without any

stipulation for payment, provided he or she is a fit subject for treatment and there is an available bed." Another resolution confines this action "for this year."

Possibly the following form of undertaking sent to the hospitals for acceptance may make more clear the above very much involved resolution:—

"In consideration of this institution participating in the distribution of the industrial fund, we undertake to admit during the twelve months immediately following the annual meeting of the Hospital Saturday Fund in 1898, and until further notice, any duly certified subscriber to your industrial fund as indoor patient (provided that there is an available bed and the case is a fit one for treatment) without stipulating for payment for the patient's maintenance. We understand that it is not desired by the Hospital Saturday Fund that such undertaking should relieve the patients from the moral obligation of making such voluntary contribution in support of the institution as he or she can afford."

In a letter appearing in the *Sydney Morning Herald*, of 5th August, over the signature of D. A. Rogers, the writer states:—

"An extract might also be given here from the memorandum of association, which will also show the public that the Saturday Hospital Committee acted within its powers when it stipulated conditions in connection with a certain portion of the fund. The extract is sub-section A of clause 3, and reads:—

"To make grants for the erection, maintenance, or repair, or in aid thereof, or towards the general expenses, of all or any of the hospitals, dispensaries, convalescent homes, or other medical charities, within the colony of New South Wales, upon such terms or conditions as to medical or surgical relief or assistance, or otherwise, as the association may determine."

"All that has been asked by the industrial branch is that any regular subscriber shall be relieved from entering the hospitals upon what is known as 'the pauper ticket.' Nothing more is asked, and nothing less is likely to be accepted; and those who state that an attempt is being made to convert the hospitals into mere benefit societies are making assertions that are unwarrantable, and cannot be justified except in the light of ignorance. The Hospital Saturday Committee is now working in the direction of revenues for our hospitals that will be certain, 'fair weather or foul,' while the hospitals—at least a section—are counteracting these efforts by refusing to accept unless they are allowed to dictate to and control the actions of the Hospital Saturday Committee. It is a question of the hospitals quarrelling with the fund and not the fund with the hospitals."

We question very much the assertion that "The Hospital Saturday Committee is working in the direction of revenues for our hospitals that will be certain 'fair weather or foul,' etc." We insist that this very autocratic and self-assertive committee, by its action in jumping the position of collectors in this cause, and in dictating certain terms of which "Nothing more is asked, and nothing less is likely to be accepted," is doing actual damage to the cause

which it professes to champion, and the following are our reasons:—

It is asserted that a certain amount of money is collected yearly from a source that has not been hitherto approached; but we wish to point out the following ill-effects that may accrue:—

1. Certain regular subscribers, seeing the amount that the hospitals are getting from this source, may lessen or discontinue their subscriptions.
2. Many of the working class, when called upon to contribute a small amount towards their maintenance in hospital, refuse to do so on the plea that they contribute regularly to the Hospital Sunday Fund, by virtue of which action they demand certain privileges of the hospital.
3. As already pointed out, this annual parade of the benefits to be obtained from hospitals without payment, on complying with certain conditions, tempts a large number of candidates to seek admission who are not eligible, because they could afford to get medical and surgical attendance in another form.
4. The Hospital Saturday Industrial Fund is practically undercutting the Benefit Societies, by offering medicine, medical attendance, and maintenance in hospitals for a smaller weekly contribution than these societies require; therefore we cannot expect these societies, or their thousands of members, to contribute to either the Hospital Saturday Fund, or to those hospitals that thus unjustly, and in the name of charity, compete with their interests.

The assertion made by Mr. Rogers, "that those who state that an attempt is being made to convert the hospitals into mere Benefit Societies, are not to be justified except in the light of ignorance," is untenable, and we reiterate the words of the *Sydney Morning Herald*, in condemnation of the action of the "Hospital Saturday Committee," in an excellent editorial on this subject (3rd August):—"Perhaps at next meeting it will be resolved to apply the whole collections of the fund subject to a condition which will make the Association a big benefit society," to which we may add that such a proceeding would only add to the pauperising of the contributors, the degradation of the "Saturday Hospital Committee," and the depletion of the finances of such hospitals that may accept these atrocious terms. To the credit of the management of the Sydney Hospital, the Prince Alfred Hospital, the Carrington Convalescent Hospital, the North

Shore Hospital, and the Western Suburbs Cottage Hospital, they refused to accept the dictation of this autocratic Committee, who by their action are now trying to alienate funds that were subscribed by members of the public for various charities which they were led to believe would be benefited by these donations. We think that this action taken by the "Hospital Saturday Committee" is a breach of faith with those who have subscribed to the fund, and will ultimately prove a death blow to the Hospital Saturday, which, under the circumstances, would be "a consummation devoutly to be wished."

We think that the total extinction of this festival, with its advertisement of the gratuitous benefits, to be conferred upon all-comers who seek hospital assistance, will be a benefit rather than a calamity to those hospitals who do not participate in the proceeds of the collections on the conditions imposed.

The hospitals should endeavour to deserve their name by treating as a guest ("hospes") any such person, and those dependent on such person, who has shown his willingness to provide against the ordinary ailments that may affect himself or members of his family in the event of any of them being overtaken by some extraordinary calamity needing hospital treatment.

At the present time there is a risk of our so-called hospitals becoming huge state-aided institutions, or benefit societies which are run through the gratuitous services of the Honorary Medical Officers. All persons receiving such services should understand that, to this extent at least, they are the recipients of charity.

With all the available Sick and Benefit Clubs in existence in this colony, every head of a family can, at a small weekly cost, ensure medical attendance and a weekly allowance during sickness or the result of an accident. Failing this, he or she seeking and getting hospital assistance should not quibble at the word "pauper," which literally signifies "a person without means."

HOSPITAL ABUSE IN N. S. WALES.

IN a presidential address by Dr. C. P. B. Clubbe, the retiring president of the New South Wales Branch of the British Medical Association, delivered at the annual meeting of the Branch on 25th March last, he pointed out the manner in which hospitals established for charitable purposes were abused, how people who were able to pay for medical advice and attendance ob-

tained admission into such hospitals to the exclusion of poor and deserving subjects. We refer our readers to the report of his admirable remarks on this subject, which will be found on page 142 of the April number of the *Australasian Medical Gazette*.

The recent discussion and dispute concerning the distribution of a portion of the Hospital Saturday Fund cannot fail to involve as a side issue the all-important question of the abuse of charity in the form of hospital relief. How are we to define the charitable relief supposed to be given, and how are we to discriminate suitable recipients for this charity?

Perhaps it would be well first to discuss the manner in which money is obtained for the support of these institutions. First, there are certain donations of fixed sums, varying from ten to several hundred pounds, either in the form of gifts or as legacies. Second, there are annual subscriptions given by what are called regular subscribers. Third, a Government subsidy is annually granted, bearing a ratio to the amount subscribed by the public. Fourth, donations or a fixed sum, the amount of which is estimated according to the patient's means, are exacted from patients or their friends as a contribution towards maintenance while in the hospital. Fifth, certain societies and some classes of the community, as well as merchants and shipping agents, contribute sums of money on the understanding that they have the power of recommending the admission of patients who may be found suitable for hospital relief. An effort is now being made to bring the contributions which form the Hospital Saturday Industrial Fund under this latter category.

It is maintained by some persons conversant with the management of hospitals that the acceptance of any subscription given with a view of *quid pro quo*, is a great cause of the abuse of hospitals. No matter how gratefully subscriptions are received, that gratitude assumes the form which is defined as "a lively appreciation of more favours to come," and involves the Hospital Committee in a constant dread of doing anything that would offend a subscriber and lead to a withdrawal of the subscriptions. It has been found that many people subscribe, not so much for the privilege of recommending the indigent poor, or for the general good of the institutions, but in order that they may lighten the responsibilities likely to fall on them when any of their employees, friends, or perhaps relatives are taken ill. It is a well-known fact that large business firms recommend their employees on the plea that they are regular contributors to the

hospitals. Shipowners, through their agents, do the same thing for the sake of their seamen who may happen to be ill when in a foreign port, thus obtaining advice in cases of trifling ailments, perhaps with the necessary certificate, and thereby deprive some private medical practitioner of his legitimate fee. The methods of business and shipping firms are peculiar. The patient is sent to the hospital provided with the usual order, signed by a clerk, but on paper having the firm's official stamp. Many of these patients are not indigent and unable to pay for medical advice, although the certificate declares them to be so.

One of the officials in a steamship company admitted to the superintendent of a large Sydney hospital that his company did not employ any doctor to attend its steamers because the necessary medical assistance was given by the hospital to which the firm subscribed.

Some of the Chinese residents in Sydney, with their natural shrewdness, take advantage of the following loophole:—The by-laws of a Sydney hospital permit subscribers of £2 2s to nominate one in-patient. There is also a rule which provides for the admission of patients who pay £1 1s. per week, but the Chinese decline to be admitted under this rule. They claim admission on subscribing £2 2s. (generally raised by their countrymen), and for this sum may be a tax on the hospital during a long illness extending over two or three months. There is a Railway and Tramway Hospital Fund, which contributes somewhat large subscriptions to a Sydney hospital, and exacts in return hospital treatment for its members, thus enabling an engine-driver making 12s. 6d a day to become a free hospital patient.

Dr. Clubbe in his address, and we in the foregoing remarks, maintain that considerable abuses exist in our hospitals as regards this dispensing of charitable medical assistance, and consider that a radical reformation is necessary, so that the funds of these institutions should be disbursed only in giving relief to suitable subjects, and not be utilised to the damage of the medical profession.

We, therefore, commend to the careful consideration of the boards managing the hospitals and charities of this colony the two important questions in the beginning of this article:—

1st. How are we to define the charitable relief intended to be given?

2nd. How are we to discriminate suitable recipients for this charity?

Having decided upon appropriate answers to these queries, it will be the duty of those

managing our hospitals to be firm and decided in adhering strictly to the conclusion to which they shall have arrived.

MEDICAL EXAMINATIONS IN QUEENSLAND.

IN a previous number we published a discussion that took place at a recent meeting of the Brisbane Branch of the Association, on the subject of medical examinations under the Queensland Civil Service and Factories Acts. That report, it seems to us, cannot be lightly passed over. It appears that, under the Factories Act, the fee of 2s. 6d. is paid, for each examination, to medical men who undertake the work. As was pointed out by all the members present, this fee is lamentably small—so small, indeed, that for charity's sake it would, in our opinion, be more in keeping with the dignity of the profession to forego it altogether. That, however, is not the point to which we wish to draw our readers' attention. It appears "that a large number of cases had been put through by a medical man in a very short space of time—twelve in 30 minutes." If that be true, it passes beyond our comprehension that a medical man could honestly fill up and sign the regulation certificate, which runs thus:—"I have this day examined—, and I hereby certify that — is sound in constitution, is now in good health, and has no physical defects."

We are not told the name of the medical man referred to above, but one of the examiners makes no secret of the fact that he looks on "the examination as an utter farce," and that "if he found it necessary on inspecting them he put a stethoscope to them; if they were ruddy and healthy looking he did no more than look at them."

The redeeming feature of the report is, that this conduct was condemned by every medical man who spoke, and we congratulate them on the stand they have taken. It is to be hoped that such examiners will see the error of their ways, and that if they are not prepared to make an honest examination for the authorised fee, they will decline to make any examinations in the future.

THE NEW SOUTH WALES LAGER BEER BREWING COMPANY.—The F. F. Brewery in Barmen, Germany, has been awarded first prize and gold medal over all the German beers exhibited at the Brewing Exposition at Ramscheid this month (June). The plant used by the N.S.W. Lager Beer Brewing Co. is in every detail a similar plant.

VITAL STATISTICS.

SYDNEY.—There were 1,002 births and 492 deaths registered in Sydney during June. The principal causes of death were:—Smallpox, 1; measles, 17; influenza, 14; puerperal fever, 5; diphtheria, 10; typhoid fever, 6; bronchitis, 47; pneumonia, 26; cancer, 30; phthisis, 37.

MELBOURNE.—The chief causes of death in greater Melbourne during June were as follows:—Measles, 41; diphtheria, 12; typhoid fever, 9; cancer, 44; phthisis, 65. There were in all 1,048 births and 657 deaths registered during the month.

HOBART.—Dr. Sprott reports that during the month of June there were 43 deaths registered in the registration district of Hobart. There were 15 deaths—males 11, females 4—in the city proper. The principal causes of death were:—Cancer, 2; old age, 5; heart disease, 1; and the remainder were of a general nature.

ADELAIDE.—The following were the chief causes of death in May:—Enteric fever, 3; cancer, 5; phthisis, 8.

BALABAT.—There were 5 deaths from measles, 2 from diphtheria, 2 from typhoid fever, 3 from erysipelas, 2 from cancer, 6 from phthisis, 3 from bronchitis, 5 from pneumonia, and 3 from enteritis during June.

WESTERN AUSTRALIA.—The Registrar-General reports that during the quarter ending, March 31st, 1898, there were 10 deaths from diphtheria, 117 from typhoid fever, 35 from diarrhoea, 26 from dysentery, 11 from cancer, 30 from phthisis, 31 from pneumonia, 76 from enteritis.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

The Women's Hospital, Melbourne.—Among the by-laws confirmed at a meeting of subscribers to the Queen Victoria Hospital is one making it mandatory for all future appointments to the medical staff to be approved of in the first instance by the existing staff.

Zeehan Hospital, Tas.—The Hospital Board of Zeehan has accepted a tender of £693 for additions to the hospital buildings. Immediately the sanction of the Government is obtained the work will be started.

QUEENSTOWN.—The annual general meeting of the subscribers to the Queenstown Hospital Union was held on July 29th. Thereport was read, showing that for the past twelve months 195 patients had been treated, of whom 58 were for typhoid fever. Seven deaths had occurred, five being from typhoid. The total number of subscribers at present was 1,425. The balance-sheet showed a credit balance of £119, the total receipts for the year being £8,130, including the Government subsidy, £200. The building fund of the new hospital was found to be in a very satisfactory state. A special vote of £400 has been granted by the Government, and a sum of £1,000 will be voted conditionally on £500 being raised locally, which has been done as follows:—Receipts from a bazaar, £105; donation from Mr. Bowes Kelly, £100; vote from the Mount Lyell Company, £200; and general subscriptions, £123, making a total of £527. This gives the sum of £1,927 available for the building. The plans and designs have been approved by the committee, and the preliminary work started, and tenders for the erection will be called at once. The report and balance-sheet were adopted, and a hearty vote of thanks accorded to the committee for their services in managing the institution during the year.

LAUNCESTON HOSPITAL.—The Premier had an interview with the Board of Management on August 1st, and has promised to consider suggestions made for

(1) completion of fever wards; (2) equipment of a modern steam laundry; (3) increased vote of money to meet excess of expenditure over receipts during last year.

HOBART HOSPITAL.—This hospital receives £5,860, as against £5,680 voted last year, as a Government subsidy.

ZEEHAN HOSPITAL.—For the past five or six years considerable difficulty and annoyance have been caused to the Board of Management, owing to one of the local medicos, who is not on the hospital staff, insisting upon visiting patients there when requested by the patient or the friends. Although it was decided by the Board that the offending medico could not attend hospital patients—unless in consultation with, or by permission of the senior surgeon of the staff—he entered the hospital by the back entrance, and was discovered by the matron attending to one of the patients, without permission of the senior surgeon. The matter was reported by the matron to the Board, and a long discussion followed, in which the Board's former action was upheld. Not satisfied, however, a special meeting of the hospital subscribers was convened, and after two hours' discussion the following resolution was carried:—"That this meeting instruct the Zeehan and Dundas Hospital to frame a by-law to be sent on to the Attorney-General for his approval, to the following effect:—'That at any time a patient, or, if the said patient being too ill, his friends or relatives, shall have power to call in any doctor, other than one of the honorary staff, provided he or they make a written application to the matron, or person in charge, to that effect, who shall at once give notice to the doctor or doctors who has, or have, been in charge of such patient, that she has granted such permission. It shall not be compulsory that he, or they, must be in consultation with any hon. members of the staff.'" What further action the Board may take is a matter of conjecture, but it is believed a ballot of the subscribers will be taken to ascertain their wishes.

MEDICAL NOTES.

MEDICAL MAGISTRATES.—The following gentlemen have been appointed magistrates for their respective colonies:—Dr. Bruce A. Anderson, of Westbury, Tas.; Dr. C. F. Eichler, of Sydney; Dr. G. Wigan, of Armidale, N.S.W.; Dr. E. A. Woodward, of Blayney, N.S.W.

LITERARY NOTES.

The prize essay upon Leprosy in Australia, by Dr. J. Ashburton Thompson, President of the New South Wales Board of Health, has been published in the New Sydenham Society's Series. The *British Medical Journal*, of July 2nd, contains a review of the essay as it appears in that series.

NAVAL AND MILITARY INTELLIGENCE.

VICTORIAN MILITARY FORCES.—*Reserve of Officers, Medical Staff Militia.* James William Moore Blick, gentleman, has been appointed Surgeon-Captain, on probation. Brigade-Surgeon-Lieutenant-Colonel John Fulton, M.D., has retired, with permission to retain his rank and wear the prescribed uniform.

TASMANIAN INFANTRY FORCES.—Caleb Joice, M.B., has been appointed Surgeon-Lieutenant. Surgeon-Major Gutteridge, of the Launceston Rifle Regiment, has been placed upon the Retired List, with the honorary rank of Surgeon-Lieutenant-Colonel.

NEW ZEALAND.—*Dunedin Volunteer Bearer Company.* Joseph Osborne Closs and Ralph Stuart Stephenson have been appointed Surgeon-Captains. *Native Rifle Volunteers* (Auckland). Emile Dupont Aubin has been appointed Surgeon-Captain to No. 2 Company.

QUEENSLAND DEFENCE FORCE (LAND).—Surgeon-Major Francis Meagher Geoghegan has been placed on the retired list (Defence Force Division). Surgeon-Captain Edward Hyacinth O'Doherty has been placed on the retired list (Defence Force Division) with the rank of Surgeon-Major.

OBITUARY.

THOMAS PRIMROSE ANDERSON, M.B., Ch.M., Glas. 1890, died at Kiama, N.S.W., on July 31st, aged 28. Dr. Anderson, who had been in practice in Kiama for the past six or seven years, had been in failing health for some time past. He was very popular in the district.

JOHN THOMAS BURGOYNE, L. and L. Mid., R.C.S.I. 1871, died at Maryborough Hospital, Q., on June 28th, aged 49 years.

AUSTIN NATHANIEL COOPER, L.K.Q.C.P.I. 1882, F.R.C.S.I. 1885, formerly of Tamworth, N.S.W., died at Redfern, Sydney, on July 10th, from cerebral hæmorrhage.

LESLIE THOMAS HOLLIS, M.B., Ch.M., Univ Sydney 1890, died at Goulburn, New South Wales, on August 7th, aged 33 years. Dr. Hollis was held in the highest esteem by all classes for his uniform courtesy and affability. He was born at Goulburn in 1855, and received his early education at the Church of England Grammar School in that city. He then served the Department of Public Instruction as a pupil teacher for about four years, after which he, in 1885, entered the University of Sydney, and enrolled himself at St. Andrew's College. Whilst at St. Andrew's he took a prominent place in the College Literary and Debating Society. He was also one of those who took a leading part in founding the University Undergraduates' Association, an organisation having for its object the advancement of the students' interests. His career at the University was a brilliant one. Graduating in 1890, Dr. Hollis was appointed a resident medical officer of the Sydney Hospital. He began private practice at Goulburn in 1891 with most gratifying results. In the same year he was elected Member of Parliament for Goulburn, and continued to occupy that position till the close of the last Parliament. When in his teens, Dr. Hollis suffered a severe illness, one of the complications of which was endocarditis, which left its usual traces. About three years ago he was prostrated by right-sided paralysis, the result of an embolism. Since then he has made a steady improvement towards a recovery, though with a much damaged heart and greatly enfeebled constitution. The ultimate cause of his death was heart failure, following influenza.

SIDNEY RUDGE ROBINSON, M.R.C.S. Eng. 1838; L.S.A. Lond. 1843, a colonist of 35 years' standing, died at Geelong, Vic., on July 7th, aged 82 years.

LOUIS SEGOL, M.D., Montpellier, who arrived in N.S.W. in 1865, and practised at Emmaville, Inverell, and Narrabri, died at Inverell, N.S.W., on August 10th.

RICHARD BATTERSBY SCHOLES, M.B., C.M. Edin. 1874, superintendent of the lunatic asylum at Goodna, Q., died rather unexpectedly on July 8th from lung and heart affections. Dr. Scholes was formerly assistant superintendent at Gladesville and Callan Park Asylums (N.S.W.). He was appointed to the Woogaroo Asylum,

Goodna, seventeen years ago. He was 45 years of age.

WILLIAM PARTON WILLIS, L. and L. Mid. R.C.P. and S. Edin., L.F.P.S. Glas. 1892, died suddenly at Tibooburra, N.S.W., on August 1st. Dr. Willis, who had formerly practised at Westport, N.Z., had recently commenced practice at Tibooburra. He was 34 years of age.

SURGEON YONEL, of H.M.S. "Penguin," died recently from dysentery at Tonga, where the warship was engaged in survey work.

CHANGE OF ADDRESS, ETC.

BALDWIN, Dr. GERALD R., has entered into partnership with Dr. S. J. Burke, of North Melbourne.

BEITH, Dr. R., has removed from Mudgee to Kiama, N.S.W.

BELGRAVE, Dr. T. B., late of Broken Hill, N.S.W., and Ascot Vale, Vic., has gone to Bulong, W.A.

BELL, Dr. GEORGE, has commenced practice at Pyramid Hill, Vic.

BOYD, Dr. PERCIVAL CRAWFORD, late of London, has started practice in Hobart, Tasmania.

CONLON, Dr. W. A., of Sydney, has commenced practice at Beffton, N.Z.

DALTON, Dr. H. M. C., has removed from Burrows to Murrumburrah, N.S.W.

D'OMBRAIN, Dr. E. A., formerly of Germanton, N.S.W., has settled at Casterton, Vic.

EADON, Dr. S. B., has removed from Walma Creek, Vic., to Tocumwall, N.S.W.

JOHNSON, Dr. J. G., of Evandale, and Dr. C. S. Richardson, Launceston, have exchanged practices.

MACGOWAN, Dr. E. THORBURN, has resumed duty at the Hobart Hospital after six weeks' leave of absence.

SCANLON, Dr. C. E. FOUCART, has removed from Petone to Auckland, N.Z.

STANBY, Dr., who was surgeon to the Waratah-Zeehan Railway Co., has returned to Melbourne, and Dr. Heinriche Von Seech has succeeded him.

WATSON, Dr. GEORGE GLENDINNING, of Melbourne, has started practice at 224 Elizabeth Street, Hobart, Tasmania.

WEEKES, Dr. C. J., has removed from Sydney to Mudgee, N.S.W.

WILSON, Dr. R., has been chosen Medical Officer to Gallymont Mine, Mandurama, N.S.W.

MEDICAL APPOINTMENTS.

The following medical appointments are announced:—

Belgrave, T. B., M.D. Edin., &c., to be Medical Superintendent of Bulong Hospital, W.A.

Bill, George, M.B. Edin., &c., to be Officer of Health for Gordon Shire, Vic., *vice* the late Dr. H. G. Kelly.

Boyd, A. B., M.R.C.S., Eng., to be a Public Vaccinator for District of Nelson, N.Z.

Bray, E. J., M.B. Edin., &c., to be Government Medical Officer and Vaccinator for District of Wingham, N.S.W., *vice* Dr. A. O. Howse, resigned.

Cook, H. F., L.R.C.P. Lond., &c., to be a Public Vaccinator for S.A. Owen, H. O., M.B., &c., to be Acting Public Vaccinator for Raywood, Vic., in absence of Dr. J. O. McKee.

Deane, E. W., M.B., &c., to be Acting Public Vaccinator at Kaula and Lawloit Shire, Vic., in absence of Dr. T. F. Ryan.

Deane, E. W., M.B., &c., to be Acting Officer of Health for Lawloit Shire, Vic., in absence of Dr. T. F. Ryan.

Dombraun, E. A., M.B. &c., to be Officer of Health for Glenelg Shire, Vic., *vice* Dr. A. E. Byrn, resigned.

Dowe, S. A., M.D., &c., to be Government Medical Officer and Vaccinator for District of Bobadah, N.S.W.

Fornyth, W. A., M.B., &c., to be Officer of Health for Walhalla Shire, Vic., *vice* Dr. J. Stewart, resigned.

Gregg, James, M.B., &c., to be Officer of Health for Korang Shire, North and Central Ridings, Vic., *vice* Dr. R. A. A. Manly, resigned.

Jackson, E. S., M.B., &c., to be Superintendent of the Institution for Inebriates, established on the premises of the General Hospital, Brisbane.

Joyce, C., M.B., &c., to be Officer of Health of Beaconsfield, Tas.

Lethbridge, C. F., M.R.C.S. Eng., &c., to be Public Vaccinator at Beaufort, Vic., *vice* Dr. B. J. Adam, resigned.

McNeil Andrew, Dr., to be Resident Medical Officer and Public Vaccinator of Ooigardie District, W.A.

Nisbet, W. B., M.B., &c., to be Acting Health and Medical Officer at Townsville, Q., in absence of Dr. E. Humphry.

Perry, W. D., M.R.C.S. Eng., &c., to be a Public Vaccinator for district of Petone, Vic.

Reid, M.A., M.B., &c., to be Officer of Health for Swan Hill Shire, Vic., *vice* Dr. T. M. Austin, resigned.

Ross, M. W., M.R.C.S. Eng., to be a Public Vaccinator for Petone, Vic.

Russell, A. E. J., M.B. Univ. Adel., to be a Public Vaccinator for S.A.

Stephen, W. M.B. Univ. Toronto, to be a Public Vaccinator for the District of Riverton, S.A.

Yelland, Dr., to be Resident Surgeon for the Hospital, Creswick, Vic., *vice* Dr. T. A. Wilson, resigned.

MEDICAL RESIGNATIONS.

The following medical resignations are announced:—

Wilson, Dr. T. A., as Resident Surgeon, Creswick Hospital, Vic.

Chesson, Dr. H. G., as Medical Officer, at Taroom, Q.

Austin, Dr. T. M., as Officer of Health for Swan Hill Shire, Vic.

Stewart, Dr. J., as Officer of Health for Waihalla Shire, Vic.

Howse, Dr. A. O., as Government Medical Officer and Vaccinator for the District of Wingham, N.S.W.

Manly, Dr. R. A. A., as Officer of Health for Korang Shire, North and Central Ridings, Vic.

Byrn, Dr. A. E., as Officer of Health for Glenelg Shire, Vic.

Adam, Dr. B. J., as Public Vaccinator at Beaufort, Vic.

REVIEWS.

THE TALLERMAN TREATMENT BY SUPERHEATED DRY AIR IN RHEUMATISM, GOUT, RHEUMATIC ARTHRITIS, STIFF AND PAINFUL JOINTS, SPRAINS, SCIATICA, AND OTHER AFFECTIONS. Case Notes, and medical reports, with numerous illustrations. Edited by Arthur Shadwell, M.A., M.B. Oxon, M.R.C.P. London: Baillière, Tindall, & Cox. Sydney: L. Bruck. 1898. Price, 4s.

In the preface, the Editor says: "The object of this book is to present in a convenient form full and authoritative information respecting the Tallerman treatment, which has been in use now for some four or five years in various countries, but is still very imperfectly known. . . . I originally approached the Tallerman invention with the scepticism which becomes second nature to medical men, but having tested it on my *corpus vile*, I found it did what it pretended to do, etc."

The Tallerman treatment is a new method of applying heat locally to the cure of disease and the relief of pain. The most important feature of the invention is the use of perfectly dry air, which enables a much higher temperature to be applied to the part affected than has hitherto been possible, with correspondingly powerful results. The apparatus consists of a copper chamber, varying in size and shape according to the part which it is desired to treat, but generally taking the form of a cylinder. The limb to be treated is passed into the open end of the cylinder through an air-tight curtain, which is afterwards secured in such a way as to close the chamber completely. The distal end of the cylinder is furnished with an opening so contrived as to permit

the escape of the evaporated moisture at intervals. In this way the air is kept dry and scalding prevented. The heat is applied by means of gas jets. A thermometer is fixed to the cylinder to indicate the heat. The part to be treated is inserted when the heat in the cylinder reaches 150° F., and the heat is gradually raised to 250 to 280° F., at which it is kept for from half-an-hour to an hour. Clinical notes of many cases treated by Dr. Knowsley Sibley, Mr. Willett, Dr. Ward Cousins, and others, will be found in the book, in most cases with very satisfactory results. In all cases the relief of pain appears to be very prompt. We cordially recommend the study of this treatment to all who have chronic joint affections to treat.

THE EXTRA-PHARMACOPŒIA. By William Martindale, F.L.S., F.C.S., Member of the Council of the Pharmaceutical Society; and W. Wynn Westcott, M.B., Lond., H.M.'s Coroner for North-east London. Ninth edition. 1898. London: H. K. Lewis. Price, 10s. 6d.

This little volume is so well known throughout the English-speaking medical world, that detailed criticism would be superfluous. It is found in every medical man's library, even though that library consist of only a single row of books upon an office table. It is indispensable. This, the ninth edition, has been revised in order to bring it up to date and into line with the changes in the new "British Pharmacopœia." The section dealing with antitoxins, serums, and lymphs, has been revised by noting the extended use of serotherapy and organotherapy; the diagnostic value of Mallein and Tuberculin, and the Widal test of typhoid fever; and also the use of serums and antitoxins as prophylactics against diphtheria and typhoid.

LECTURES ON THE THEORY AND PRACTICE OF VACCINATION. By Robert Cory, M.A. M.D. Cantab.; F.R.C.P. Lond., Physician-in-charge of the Vaccination Department of St. Thomas' Hospital, Teacher of Vaccination in the University of Cambridge. London: Baillière, Tindall and Cox. Sydney: L. Bruck, 1898.

A work on vaccination by one having such a large experience as Dr. Cory in the practice and teaching of vaccination could not fail to be interesting. These lectures contain the substance of those delivered periodically to his pupils. The work is an excellent treatise on vaccination, and its value is considerably increased by a number of beautifully finished coloured plates. We should like to see this work in the hands of every practitioner in Australia, where, especially in New South Wales, vaccination is so much neglected. Dr. Cory's work should be productive of much good.

DOCTOR AND PATIENT—HINTS TO BOTH. By Dr. Robert Gersuny, Director and Principal Visiting-Surgeon of the Rudolfinerhaus, Vienna. Translated by A. S. Levetus, with a preface by D. J. Leech, M.D., F.R.C.P., Professor of Pharmacology in the Owens College and Victoria University. Bristol: John Wright & Co. 1898. Price, 2s. net.

Some excellent advice is here tendered to the members of our profession. This advice appears to be the outcome of acute observation and a laudable desire on the part of the author that medical men should do the right thing at the right time. We have read this volume with considerable interest at a time when medical ethics appear to be studied with little ardour. A perusal of a work of this kind would often prevent those disputes and heartburnings unfortunately so common in our profession. But if the

practitioner must study the patient's welfare, so, on the other hand, must the patient act his part. To patients, Dr. Gersuny devotes some considerable space. The closing pages are devoted to a study of benefit societies and cheap medical treatment.

DISEASES OF WOMEN: A TEXT-BOOK FOR STUDENTS AND PRACTITIONERS. By J. C. Webster, B.A., M.D. Edin., F.R.C.S. Edin., Demonstrator of Gynaecology, McGill University, etc., etc. Illustrated with 241 figures. Edinburgh and London: Young J. Pentland, 1898.

In the preface to this book—which is dedicated to William Gardner, M.D., Professor of Gynaecology in the McGill University—the author claims to have kept constantly before him the following aims, viz.: (1) To give prominence to the scientific basis of each subject under consideration. (2) To study clinical features in their widest relationships. (3) To insist upon caution in the adoption of therapeutic measures not yet thoroughly tested.

The first three chapters deal with the Anatomy of the Pelvic Viscera, and especially with that of the Pelvic Floor. Dr. Webster is at variance with some other writers as to the arrangement and the importance of the levator ani and other muscles in resisting intra-abdominal pressure. The pelvic fascia is very carefully described, and to it the author ascribes the chief part in resisting intra-abdominal pressure. The book is very clearly and concisely written, and is well worthy of a place in every library. The illustrations distinctly portray most of the pathological conditions met with in the female generative organs, as well as most of the instruments used in the minor operations of this branch of surgery.

THE DIAGNOSIS OF DISEASE. By J. Porter Parkinson, M.D., M.R.C.P. Lond., F.R.C.S. Eng., Medical Registrar to the Westminster Hospital, Assistant-Physician to the Hackney Children's Hospital, etc., etc. London: Baillière, Tindall & Cox. Sydney: L. Bruck. 1898. Price, 4s.

A little book such as this is of great value to the senior student or young practitioner. The various methods of examination generally employed, and the deductions which may be made from their employment, are well described. Many of the rare diseases have been judiciously passed over.

There are eleven chapters devoted to the acute specific fevers, diseases of the respiratory organs, circulatory system, alimentary tract, liver and spleen, urinary system, nervous system, joints and bones, and blood respectively. We have nothing but good words for this small volume, which is well illustrated (better, in fact, than most of its kind), and we have no hesitation in recommending its study.

A TEXT-BOOK ON THE PRACTICE OF MEDICINE. By James M. Anders, M.D., Ph.D., L.L.D., Professor of the Practice of Medicine in the Medico-Chirurgical College, Philadelphia, etc., illustrated. Philadelphia: W. B. Saunders. Melbourne: James Little. 1898.

This fine volume of nearly 1,300 pages does credit to the author. Part I., containing over 370 pages, is devoted to infectious diseases. The first chapter in this part treats of typhoid fever, and is one of the very best descriptions of this disease, its diagnosis and treatment, that we have seen in any text-book. The diseases of the various organs are treated of in detail. A feature

in the book is some fifty-six tables of different diagnosis scattered throughout the work. Many formulae which experience has shown to be possessed of real therapeutic importance are also introduced into the text. Wherever the dosage is stated the metric equivalent is also stated in parenthesis. The illustrations are clear and appropriate to the text.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Rigby, William Henry, M.B., Univ. Melb., 1891.
Woodside, Robert Neville, M.B., 1898, Ch.B., 1897, Univ. Melb.

NEW ZEALAND.

Brown, George Patrick, M.B., Bach. Sur. Univ., N.Z.

SOUTH AUSTRALIA.

Biffin, Harriett Eliza, M.B., M.S. Syd. 1898.
Wood, Ellen Maude, L.R.O.P. & S. Edin.; L.F.P. & S. Glas., 1897.

Additional Degrees.

Chapple, Frederic John, B.S. Melb., 1898.
Rogers, Richard Sanders, M.D., Adel. 1897.
The name of William Robert Nuttall Maloney has been erased from the South Australian Register of Medical Practitioners.

TASMANIA.

Boyd, Percival Crawford, L.R.O.P. Edin., 1879, L.R.C.S. Edin., 1879.
Obeetham, Francis, L.R.O.P. Edin., 1881, L.M. Edin., 1891.
Damman, George William, M.B., Ch.B. Melb., 1889.

VICTORIA.

Baldwin, Gerald Robert, L.R.O.P. Lond. 1893; M. 1898, F. 1894.
R.O.S. Eng.
Levy, Edward Bernard, L.R.O.P. & R.O.S. Edin. 1896; L.F.P.S. Glas. 1896.
Tighe, John Michael, L.R.O.P. & R.O.S. Edin. 1896; L.F.P.S. Glas. 1896.

BIRTHS, MARRIAGE AND DEATHS.

BIRTHS.

ANDERSON.—On the 4th July, at Undowah, Burwood Road, Hawthorn, Vic., the wife of Eugene Anderson, M.D., of a son.
SAWKINS.—On the 31st July, at Prince Alfred Hospital, Sydney, the wife of F. J. T. Sawkins, M.B., Ch.M., of a daughter.

MARRIAGE.

KEOGH—GRAHAM.—On the 29th June, at St. Mary's R.C. Church, Lancesfield, Vic., by the Rev. M. Farrelly, Arthur G. Keogh, M.B., Ch.M., to Ellen Jessie (Nellie), fourth daughter of the late R. S. Graham, Springbank, Lancesfield.

DEATHS.

COOPNER.—On the 10th July, at Cleveland-street, Sydney, suddenly, of cerebral hæmorrhage, Austin Nathaniel Cooper, F.R.C.S.I., formerly of Tamworth, eldest son of Austin Damer Cooper, Esq., of Drummigh House, County Dublin, Ireland.
DUNOAN.—On the 27th July, at Mollison-street, Kyneton, Vic., Margaret Rennie, daughter of the late Hugh Rennie, Esq., of Coburg, and beloved wife of Dr. R. B. Duncan. R.I.P.
M'LEOD.—On the 17th July, at Hurstville, N.S.W., Ian Hugh, infant son of Dr. M'Leod.
ROBINSON.—On the 7th July, at Fenwick-street, Geelong, Vic., Sidney B. Robinson, M.R.C.S.E., aged 82.
WILLIS.—On the 1st August, at Tibbooburra, N.S.W., Dr. W. P. Willis, aged 34 years, late of Albert Park, and Westport, New Zealand.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

PRESIDENTIAL ADDRESS.

BY H. R. SALMON, M.B., CH.B., BALLARAT.
BALLARAT DISTRICT MEDICAL SOCIETY, VIC.

PERMIT me to thank you for the great honour you have done me in electing me to preside over your deliberations during the past year. As the youngest member who has yet held the position of President to your Society, it is doubly pleasant to me to draw your attention to the encouraging state of our affairs (as mentioned in the annual report). We have received a welcome accession of new members during the past year. We are specially indebted to our country members, who, at personal loss and inconvenience, have attended to contribute interesting and valuable papers.

This night is one to be marked with a white stone, for the Ballarat and District Medical Society crosses the bar for the higher life afforded by becoming a District Branch of the Melbourne Branch of the B.M.A. The advantages to be gained by such an alliance have been so long and urgently advocated by this Society that short reference to them need now be made.

Let it be sufficient to say that by becoming allied to such an important and flourishing branch of an organisation which is represented wherever British territory exists we extend our interests, and, in dealing with matters concerning which individual members may differ, we have always a Court of Appeal whose decisions shall be free from the charge of parochial interest or bias.

Being on the eve of such an important departure it will possibly interest present members to know something of the early history of the Society, and I may be pardoned for a passing reference. The first and preliminary meeting was held at Craig's Hotel on the 11th May, 1886. There were present Drs. Bradford, Colquhoun, Holthouse, Jordan, M'Connochie, Morrison, Radcliffe, Usher, Whitcombe, and Woinarski. Of these ten, three have already sought the shades and only two—Drs. Morrison and Jordan—remain members of the present Society.

Drs. Whitcombe, Woinarski, M'Connochie, and Morrison were elected at a provisional meeting to draw up rules, and at a second

meeting, held on the 25th May, 1886, at which there were eleven present, Dr. Holthouse was elected the first President, Dr. Whitcombe Vice-president, Dr. Radcliffe Treasurer, Dr. W. Morrison Secretary and Librarian, and Drs. Jordan, Woinarski, and Andrew the Committee. A dinner was held on 24th June at Craig's Hotel, and the Society was enthusiastically launched on its way. Your existing President was at the dinner and has remained a member ever since.

Dr. Bradford showed the first exhibit—a case of extroversion of the bladder, and Dr. Woinarski read the first paper on a case of membranous dysmenorrhea.

The Ballarat District Medical Society has had a chequered career. It has never been adequately supported by the medical men of the district, and those who have supported it by their annual subscriptions have not been regular in their attendance. This lack of regular attendance has been chiefly, I think, due to the fact that we are nearly all general practitioners, and that our hours of business are practically never at an end. Consequently, members have been called away when they have been most anxious to attend.

Again, the general practitioner when he imagines his day's work may be finished, is often too tired to work up a paper.

Let us trust that with a large addition of members to our list, as we have every right to expect during the coming year, the revived activity of the last two or three years may be eclipsed during my successor's term of office.

Having referred to our position as a Society in the Medical World, let me draw your attention to one or two matters concerning the profession as a whole.

The question of vaccination is one of State more than purely medical interest, but there are one or two points concerning it which affect us as individuals, and as members of a profession who are called upon to perform this simplest of operations—often too simply performed and without a sufficiently serious regard for the consequences. There are reforms that are coming but tardily though surely which require the assistance of each member of the profession for their completion.

Of late years, all over the civilized world, but in Japan and Germany especially, arm to arm vaccination has deservedly fallen into disrepute, and the use of glycerinated calf lymph has met with official and popular approval.

"In 1898 Kirchener examined the lymph of 18 calves in the Vaccine Institute, at Hanover, after it had been mixed with glycerine for use.

"The bacteria were very numerous in the first two days, but rapidly diminished in number until by the third or fourth month, when it is sent out, there were not more than 100 in a c.c.m.; but many samples were absolutely free from any microbes, and in those actually sent out the average number was one.

"Streptococci were never detected. Staphylococcus aureus was seen in one sample on the fourth day, but its inoculation in rabbits and mice gave negative results."

British authorities have satisfied themselves by microscopical examination and by observation of cases vaccinated that in the preservation of calf lymph by glycerine all sapræmic bacteria are destroyed, and that the vaccine virus instead of losing power has its action rather intensified.

After a three years experience of glycerinated calf lymph vaccination, including over six hundred cases, I can readily endorse all that has been stated by those who have had greater experience. From a continued series of arm to arm vaccinations through dirty epidermis and diseased systems one can readily imagine a lymph attenuated as regards protective power but rich in sapræmic and infective bacteria picked up by the wayside.

At institutions where glycerinated calf lymph is prepared the calves from which the vaccine is obtained should be killed and a careful *post mortem* examination made.

If the slightest sign of tuberculosis or other disease is found, the lymph should be destroyed. Only the healthiest calves should be selected beforehand, and cleanliness and general sanitary surroundings thoroughly attended to.

Given a general use of pure calf lymph, that bug-bear of vaccination, syphilis, would be entirely done away with, and references to vaccinal syphilis and allied dangers would disappear from our text books. Surely it should be the duty of a governing body imposing compulsory vaccination on its subjects to see that the risk of importing into their systems any extraneous organisms should be entirely avoided.

Is it not somewhat out of keeping with our boasted civilization that in lying-in-hospitals, where children are born of doubtful parentage, these same children should be vaccinated from one to another?

In Great Britain several institutions for the preparation of glycerinated calf lymph exist, and the increase of late years of these institutions is evidence that the profession and

the public are becoming appreciative of the pure culture in place of the bacteria loaded lymph of former times.

It is necessary to remind parents that however pure the lymph, the neglect of absolute cleanliness after vaccination is apt to produce results almost as harmful in their action as the inoculation with impure lymph.

The old-fashioned use of the poultice after the eighth day is strongly to be condemned. If cleanliness be observed no extraneous aid for safety is required, but if the operator wishes to make assurance doubly sure, some powdered iodoform and borax sprinkled on cotton wool may be applied to the arm.

Looking at the question of the development and betterment of the human race, there are few matters that will strike us with more importance than the food supply of children. On this subject much valuable time has been spent with more or less result. There are signs that we are approaching a little nearer the goal of suitable nourishment for those under the age of one year who are deprived of breast milk, but there are still many gaps in the hedge.

The direction in which we are likely to find it, is more on the same line as that in which success in surgery has been attained, viz., asepsis rather than antiseptis. Sterilized food may be free enough from pathogenic bacteria, but it does not afford sufficient sustenance to the infantile system. It is the experience of those who are best able to give an opinion that milk treated by intense heat is not easily assimilated by the weak digestive organs of the very young child, and is not antiscorbutic. As it is a matter of such importance to the State (the value of each Victorian infant, we have been told, is £112) there should be increased vigilance in regard to our milk supply.

There can be no doubt that where the infant is deprived of its mother's milk the most suitable food is fresh cow's milk suitably prepared. Hundreds of children die annually every summer, even in our small colony, from intestinal diseases produced by fermentative changes in their food, and will continue to do so until the system of dairying is altered.

While the question of our milk supply in maintaining the life of future citizens is of far greater importance to the Australian nation than the question of the referendum, State representation or riparian rights, the nation pays little or no regard to the wailing of the infant with distended alimentary canal and unsatisfied cravings, who has no vote and whose protestations are not heard beyond the four walls of the domicile

In Boston, New York, Baltimore, Chicago, and Montreal (Ashby) companies have been formed who are their own cow-keepers, and are in charge of the milk for consumption from first to last. Their object is asepsis for their milk supply. They keep the cows free from infectious disease in most cleanly stalls, and the feeding is conducted on scientific principles. The milk is "separated" into a 16 per cent. cream and skim milk cooled by ice and sent off without delay to the city laboratory. Here the prescriptions given by the attending physician are made up; the modified milk is placed in sterilized feeding bottles, stoppered with cotton wool, and sent out in suitable baskets by the company's vans. But little reliance is placed by this company on sterilization, as they believe, by long heating the milk, changes take place in the fat and proteids which are the reverse of an advantage to the infant.

In summer diarrhoea it is the usual plan to stop all milk food for a while. It has, however, been found that in this troublesome complaint milk from the Walker-Gordon Laboratory agrees very well if the fat is kept down to 1.5 per cent., sugar 4.5 per cent. and proteids .25 to .75 per cent.

It is a matter of national interest that, in large towns especially, the children of rich and poor alike should obtain a pure food supply, for it is amongst a crowded population that impurities are most apt to be found in the nourishment of those who from their insanitary environments are least able to withstand the bacteria of disease. The assistant Medical Officer for Nottingham states:—"In 1895 there were in England 7,399 deaths from tabes mesenterica, of which 3,855 were under the age of one year, 6,746 from tubercular meningitis, 42,490 from phthisis, and 6,084 from other forms of tubercle, making a total of 62,709. Without adding marasmus, bronchitis, diarrhoea and pneumonia—some of which are undoubtedly tubercular—this is a tremendous total almost the whole of which can be laid down to tubercle."

The condition of our meat supply is one in which the profession at large is intimately interested. Knowing what is admittedly an open secret with regard to this matter, are any of us satisfied that sufficient supervision is exercised over the abattoirs—public and private?

The increase of tubercular disease is sufficiently alarming to interest the layman as well as ourselves (who are the guardians of public health) in the endeavour to lessen the evil.

We know that while a temperature at from 160° to 175° Fah. will kill the bacilli of tubercle it does not injure their spores, and that the latter will even resist a temperature of 212° Fah. for fifteen minutes. It will thus be seen that cooking affords a minimum of protection from infection—it has been ascertained by experiment that the temperature in the centre of a cooked joint of over six pounds seldom reaches 140° Fah.

This evidence has been given by Dr. Woodhead in his evidence before the Royal Commission on Tuberculosis.

While referring to the question about food supply, both for young and old, there is room for reform in the appointment of our health officers. These gentlemen are miserably remunerated, and are expected to perform duties which would bring them into violent antagonism with actual or probable patients.

The community as a whole would benefit by the appointment of an independent officer, relieved from the worries of private practice, with an extended area over which he would exercise control. Other duties might be included in order that a satisfactory basis of remuneration might exist between employer and employed. Attendance at the gaols and *post mortem* work might be included. In the latter case the general practitioner would be relieved from the risk of injuring his midwifery practice, and the surgeon from spoiling the record of his cases.

Modern research in bacteriology of the skin demonstrates indisputably that pathogenic bacteria are absorbed by the epidermis and are as easily distributed to absorbent media (despite washings with the nail brush and antiseptic solutions).

By the appointment of a district pathologist resident medical officers of hospitals would be relieved from *post mortem* work, a condition of things that would be much appreciated by honorary surgeons.

I feel that I ought almost to apologise for bringing such homely subjects under your notice, but would remind my hearers that those who are poorly nourished in early life, who are weak, puny, ill-developed mentally and physically, fill our gaols, hospitals, and lunatic asylums. The ability to resist the temptation to crime is in great measure the result of a well-nourished nervous system.

The ill-nurtured have not the energy to work, but find peculation and crime with the ensuing result of being "found" by their country, an easier means of subsistence than by becoming wage-earners and the maintainers of a family.

Apart from having, as ratepayers, to bear a share in the maintenance of those who toil not nor spin from the above-mentioned causes, it is from the members of the medical profession that suggestions for a better condition of affairs must mainly come.

The profession has in the past done much in the face of great opposition from those holding vested interests in meat and milk supply, and it is to be hoped will continue to aid the great cause of sanitary science by every means in its power.

My remarks to you would hardly be complete without some passing reference to a recent discovery in surgery which has startled the whole of the medical world—I allude to the immediate reduction of deformities of the spine in Pott's disease.

The first published case was in January, 1897, and in January of this year Mr. Tubby, of London, published his experience of 60 cases.

It is interesting to learn from his paper that 300 cases have been operated on by Calot, of Paris, with only two deaths, and that Tubby himself only lost two out of his 60.

Those cases in which tubercle exists are considered unsuitable, also those in which there are cervical curves, where patients are over 20 years of age, and where much debility exists.

Lower dorsal and lumbar curves are considered the most suitable for treatment.

Five cases are mentioned in which sensation and movement were regained after paresis and paraplegia.

This year has been remarkable for the presence of epidemics. Typhoid fever, scarlatina, measles and röteln have been present to an extent not known for many years. In some instances attacks of scarlatina, measles and röteln have been consecutive in the same patient.

Each epidemic has been unusually severe in type, and the death-rate has been consequently considerably increased.

Gentlemen,—I trust I have not wearied you nor offended your intelligence by referring to matters on which you are equally as well informed as myself. It is a hard matter for one who is not a specialist to contribute any original matter.

I take consolation, however, in the saying of a wise man that originality is, after all, merely "undetected plagiarism," and I thank you for patiently listening to my few observations.

OPERATING CHAIRS WANTED.—Send full particulars with price to L. Bruck, 15 Castlereagh Street, Sydney.

ON AN EPIDEMIC OF GERMAN MEASLES OR RÖTHELN.

By D. COLQUHOUN, M.D. LOND., M.R.C.P. LOND., LECTURER ON THE PRACTICE OF MEDICINE, OTAGO UNIVERSITY, DUNEDIN, N.Z.

THE first case of an eruptive fever, which I believe to be röteln or German measles, came under my notice about February of this year, and since then to the present date (July 27th) they have been occurring in large numbers, chiefly among children, but by no means excluding adults.

The epidemic has been particularly prevalent at the Otago University among students of all the faculties, and the medical students who have been attacked have very kindly given me accounts of their symptoms, which I think are of value as a record of the disease at first hand.

Such epidemics should be discussed when they appear for many reasons. Opinions differ now and here, as at other places and in other times, as to the nature of any given case or series of cases of eruptive or febrile diseases.

Röteln is itself such a harmless ailment that if we have only to consider it we would probably hardly waste time on its discussion; but it is so easily and so constantly mistaken for the more serious zymotic diseases, scarlet fever and measles, and *vice versa*, and the errors of practice flowing from such errors of diagnosis are so serious, that it is extremely desirable we should gain such certainty on the subject as is possible.

Another advantage of placing a discussion like this on record is that we may be able to compare our experience with that of other districts or other colonies. It is not at all likely that we have suffered alone, or that we have had röteln among us while in neighbouring districts there has been measles or scarlet fever, but no röteln. It is also desirable to find out if we have had measles and scarlet fever among us as well as röteln, or if those who have believed they have found röteln are in error in that opinion.

Before going into the question of the symptoms presented by recent cases, a preliminary enquiry into the opinions of English speaking physicians may be of service.

The older writers of text-books, Watson, Elliotson and Marshall Hall, do not describe röteln, but notice 'morbilli sine catarrho' as a disease which does not protect from ordinary measles; but, following Willan, they class it as a variety of measles.

Tanner does not mention it (1869), but speaks of roseola: "This eruption simulates measles, or more often scarlet fever. Coryza is never present, nor is the rash in a concentric form, though there is often soreness and redness of the fauces, with gastric disturbances, as in scarlatina. An epidemic of roseola (described as rosalia rubeloa with anomalous exanthem, etc.), which prevailed in London in 1863-66, was in all probability caused by some peculiar atmospheric condition." He recognises several kinds of roseola, as variolous, syphilitic, æstiva, etc., and cannot be said to have taught the specific nature of rōtheln.

Trousseau's description of "rubeola," as he prefers to call this disease, is peculiar. "The rubeolic patches are paler and larger, more distinct from one another, and more isolated by intervals of unaffected skin; they disappear under pressure of the finger, and immediately reappear when the pressure is removed; they occasion intense itching, and are, to use Vogel's expression, "ardentes et prurientes."

He agrees with most other writers in representing rubeola as being the mildest of the exanthemata. "It was once looked upon as a modified form of measles, just as chicken-pox has been looked on as modified smallpox." He differs from other writers in stating that one attack does not protect, but rather predisposes to others.

It is worth special notice that Trousseau's description of the eruption differs from that of other writers, but that it answers very well to the urticarial eruptions noticed in a good many instances in the Dunedin epidemic. Trousseau's description has done much to confuse the subject, and is responsible for the scepticism of a good many physicians like Fagge, who have not themselves seen an epidemic, as to there being such a disease as rōtheln at all.

"The Transactions of the International Medical Conference for 1881" contain a number of papers on the subject.

That of Dr. Cheadle, of London, is remarkable among the others and from most descriptions of rōtheln, by the record of cases of a severe type, with a temperature of 103° and 104°, pulse 130 to 160, dry, coated tongue, and delirium.

It does not seem possible to reconcile the description of Dr. Cheadle's cases with that recognised by all other writers (except Dr. Aitken, of Netley) as characteristic of rōtheln. Either he has described something else, or we must accept the possibility of rōtheln being a more intense disease than measles. Dr. Lewis

Smith, of New York, and Dr. Shuttleworth, of Lancaster, contribute practical papers to the same "Transactions," giving details of cases. They had both large experience of the usual eruptive fevers in institutions for children. Their evidence, that many of their cases of rōtheln had suffered from measles and scarlet fever, or subsequently had these diseases, is therefore very valuable, as they had many of the children continually under notice for years.

Dr. Squire also contributes a general paper, not giving any notes of special cases. He mentions enlargement of the cervical glands as a special sign of rōtheln, and expresses the same views that he has published in "Quain" on its Symptomatology.

In "Ziemssen's System," the article by Thomas is probably one of the best that has been written on the subject of rōtheln, or rubeola, as he prefers to call it. He lays some stress on the glandular enlargement, which Dr. Dukes looks upon as very significant but does not affirm that it is invariably present. Like most other writers on the subject, he has no doubt that rōtheln is a distinct disease, and thinks that epidemics of it are as common as those of measles.

In "Reynold's System of Medicine" the disease is practically not mentioned. The article on "roseola" seems to be about nothing in particular; it certainly has no bearing on rōtheln.

Bristowe believes in epidemic roseola, as a distinct disease. Its resemblance to scarlet fever is slight, he thinks, but it is very like measles.

Roberts describes it as a separate disease. He gives its incubation period as 10 to 20 days. He thinks (following Sieveking) that the rash remains longer than that of measles or scarlet fever, its duration being never less than four or five days and as long as eight or ten days at times.

Dr. Fagge (1886) is doubtful as to the existence of epidemic roseola as a disease separate from measles or scarlet fever, and he certainly shows that most different conditions have been described under that name.

Squire ("Quain's Dictionary") describes the disease unhesitatingly as separate from measles and scarlatina. His description of it almost exactly fits the epidemic described in this paper.

Osler describes it as a separate affection, and places the incubation period at from 10 to 12 days.

Hardaway ("Pepper's System") describes cases from his own experience. He has no doubt as to the disease being different from

measles and scarlet fever. He is doubtful about the incubation period.

Hotch, in his excellent "Manual on Children's Diseases," describes "rubella," as he prefers to call "rötheln," but says: "While he must recognise the propriety of mentioning the existence of this disease when speaking of this class of affection, we must also acknowledge that it is the weight of opinion, not of proof, which has characterised rubella as a disease *sui generis*."

One of the best modern accounts of rötheln is a paper by Dr. Dukes, of Rugby. It was read before the members of the Medical Officers of Schools' Association in February, 1894. As it is not perhaps generally available, I will quote from it freely.

In the first place, Dr. Dukes is anxious to substitute the name epidemic roseola for the indefinite "German measles," or the foreign "rötheln." As a popular name, he suggests "roserash."

He illustrates the evils of the uncertainty—lay and professional—as to the nature of attacks of measles. For instance, a boy at home during vacation is exposed to the infection of measles; it is ascertained that he has already had an attack of measles, and he is sent back to school, develops English measles, and then it is found that his former attack was German measles. In this way an epidemic may be introduced into a school.

"When it is affirmed that a boy has had measles twice it generally means that he has had English and German measles."

Next, as to the life history of zymotic diseases, Dr. Dukes makes the following important statement, worth bearing in mind in our discussion on this subject.

"The fundamental law in medicine is that one attack of an eruptive fever entails immunity from a second attack during childhood."

"Founding my statement on an experience of twenty-five years of continual practice among children, I can assert that I have never seen, for all practical purposes, any real instances of children suffering from the same infectious illness twice; but I can bear witness to an endless number of errors in diagnosis; my own included."

The following remark is suggestive: "A curious fact in the life history of these zymotic diseases is that the growth of some germs in the body seems to produce so vital an alteration in the soil as to facilitate the immediate fertilization and growth of the germs of other diseases. Thus, the sequence of measles and

whooping-cough, of scarlet fever and diphtheria, and of measles and diphtheria are well-known, and recently I have observed the marked influence which influenza has exerted on subsequent development of roseola." On the subject of diagnosis he says: "This disease breeds true; it does not turn into scarlet fever or measles, but there are no cases which at times are more puzzling than the zymotic diseases—roserash, measles, and scarlet fever. In their elucidation they have entangled many of the ablest physicians, to our professional discredit and the detriment of the welfare of our schools."

"Having made the mistake myself so recently as 1887, I can sympathise with those in similar difficulty. In a group of cases which occurred in that year, one day I diagnosed the cases as scarlet fever, the next as roserash, and so on for at least a week, until I finally declared in favour of roserash."

Dr. Dukes states: "That in different epidemics the character of the eruptions vary, sometimes being like measles, sometimes like scarlet fever, while on some occasions there are both varieties of eruptions."

He gives a tabular list of symptoms, showing the differences between rötheln and measles and scarlatina. The main points of difference are as follows:

- 1 Rötheln does not protect from measles or scarlatina, or *vice versa*.
2. Incubation period of rötheln is 9 to 21 days, scarlet fever 2 to 7 days, measles 7 to 18 days.
- 3 In rötheln the lymphatic glands are enlarged and tender, notably the posterior cervical, the axillary and the inguinal. This symptom is absent in scarlet fever, and rarely present in measles.
4. Complication and sequelæ, none in rötheln, frequently severe in measles and scarlet fever.
5. Course of rötheln nearly always benign. Moore, in his "Eruptive Fevers" (Dublin, 1892), describes rötheln as "a specific eruptive fever, incubation period about twelve days, with brief febrile movement, and generally quick recovery. Enlargement and inflammation of the lymphatic glands in the occipital and cervical regions, are a constant epiphenomenon." He lays much stress on this as a diagnostic symptom; in addition, he says the sub-febrile early stage precludes the possibility of scarlet fever and the probability of measles. Still, it often happens that diagnosis is doubtful, at any rate for a time.

Incubation Period.—The following cases are of value as helping the length of the incubation period during the epidemic :

Miss M., on May 22nd, was exposed to the infection. On June 4th had some pain and stiffness about neck, and felt ill. On June 6th glands were enlarged over sterno-mastoids and at the angles of the ears. There was a dull, purple, blotchy eruption all over face and neck. On the arms and body there was a scanty, small papular eruption. Temperature, 100°. Recovery in two days. She had measles some years ago.

Miss B. came to Dunedin from Christchurch early in July. On the day of her arrival she visited a friend, who developed the eruption of röteln on the same evening ; 21 days after Miss B. had the rash, with glandular development behind the ear. She was not seen by a doctor, but volunteered the statement to me afterwards that "it was nothing, not so bad as a bad cold."

Miss M., living 12 miles from Dunedin in an isolated farmhouse, came to town for one day, on June 28th, to visit her sister, who was then suffering from German measles. On July 16th (having remained all the intervening time at the farmhouse, where no one had any eruptive fever) she felt ill, noticed that the glands of her neck were swollen, and that there was a red rash about her face and neck. The rash was noticed on her body on the 17th, and on the 28th it had disappeared, and she felt quite well. She had measles in 1893.

Nurse M. shared a room in the Nurses' Home at Dunedin Hospital with another nurse, who developed measles early in May. Exactly three weeks after the rash appeared in the first case, Nurse M. was attacked with a typical morbilliform eruption.

Mr. W., a commercial traveller, was seen by me in June. His face and neck were then covered with a dark crimson eruption, finely papular ; temperature, 100° ; pulse, 72 ; glands behind the ears enlarged. Three weeks before he had nursed a child who had a similar eruption, which was said to be "measles."

The following case is the most severe I have met with :

B.R., a delicate lad of 13, had measles in 1893. He has been partially deaf ever since, probably from post-nasal obstruction (which is marked), as the drums are intact. I saw him on July 28th ; his face and neck were covered with a deep red rash, eyes congested, throat sore. One enlarged post-nuchal gland could be felt on the right side. The legs and abdomen were plentifully sprinkled with a fine red

papular eruption. Temperature, 103°·6 ; pulse, 120.

The eruption on the face was noticed on the evening of the 27th. There was neither delirium nor brown tongue, as in Cheadle's cases, but the boy complained of headache, and could not eat nor sleep for two nights. On the 29th the temperature was normal, and on the 30th all the eruption had disappeared, leaving only a roughness and slight lividity about the face. He was then much better than he had been for a week before. If this was "Morbilli sine catarrho," then, as in other cases, we must add to Willan's statement that it does not protect from measles ; that measles does not protect from it.

The following are the cases referred to, reported by the students :

Mr. E.H.W., aged 24, student of medicine, states—

History.—Have had no other exanthemata except the genuine measles in 1893, and chicken-pox in 1877.

Present Illness.—(On May 20th visited some children with röteln). In my case the onset of German measles was sudden, and resembled very much the attack of measles which I had in 1893. There were no premonitory symptoms of malaise beforehand with the exception of a disagreeable taste in the mouth for two mornings previously, and also a slight feverish sensation on the Friday night before. On Sunday evening, June 5th, noticed some slight huskiness and soreness of throat, but this disappeared. A few hours later I very suddenly felt a severe frontal headache immediately above the eyes. This remained much the same, later shivering and slight aching much as in influenza onset. Felt no nausea, but did not sleep well in the night. Next morning, June 6th, noticed slight enlargement of glands on posterior edge of sterno-mastoid, also a rash below the ears and on the upper part of chest. The rash at first was papular, the papulae being small, dark red, and not close together ; slight mottling also on the forehead. Temperature, 100°. Appetite not impaired at this time ; remained up till afternoon, when my eyes became uncomfortable from reading. Felt very hot that night ; eye-balls aching, especially when turned upwards ; frontal headache ; aching in limbs. Temperature, 101°·8. Dover's powder, grains 5, caused profuse sweat, and next morning, June 7th, rash was universal ; skin raised and swollen in appearance, dark crimson in colour ; rash down to wrists and down to ankles, better marked later in day. That night aching in limbs was very severe, and back also

felt stiff, eyes congested and smarting. Temperature, 101°. The feverish symptoms seemed to occur in paroxysms in my case, and during them my appetite was poor, between them good.

On Wednesday, June 8th, constitutional symptoms disappeared, and rash began to fade. After bath of Condyl's fluid skin was very irritable, itching was severe, and only increased by scratching; urticarial in its character but without its distinctive rash. This itching continued for the next day also. While the rash was going the roof of the pharynx and fauces became very dry and painful; swallowing painful. This only lasted for eight hours.

The after effects: No catarrh or cough, eyes unaffected; desquamation was branny, and continued for four days in various parts of body.

A discolouration of skin, very like the rash in the disease, has persisted under the right ear; now nearly six weeks since rash disappeared. Glands were never much enlarged, and were not painful; subsided rapidly.

Summary.—No lengthened period of malaise beforehand; rash began below ears and on chest; highest temperature, 101°.8; rheumatic pains in back and limbs; throat was not sore until rash was disappearing; glands not much enlarged, and not painful; severe itching while rash disappearing; incubation, apparently, exactly a fortnight.

CASE II.—Mrs. W., age 50.

History.—Had scarlet fever during childhood; chicken-pox and measles also in childhood. Nursed me during my attack of röteln (June 5-8).

Present Illness.—Felt ill and out of sorts about 10 days before onset, which occurred on June 24th; began by shivering and aching in limbs, eyes slightly congested. Temperature that night, 100°.8. Next morning slight appearance of rash below ears; eyes very much congested. On June 26th rash was universal, even on backs of hands slightly. Glands behind ears and on neck hot and enlarged. That evening began to complain of aching and pain down spine, also in legs. This was severe, and caused great discomfort. The slight headache had disappeared. The pains were rheumatic in their character and intensity. On June 27th these rheumatic pains were much less severe; rash fading rapidly. But for weakness, felt much better. Slight branny desquamation while rash was disappearing.

Since the disappearance of the measles patient has not had the slightest sign of muscular rheumatism, which had troubled her con-

tinuously for months previously, and also for several winters.

Summary.—About ten days previous malaise; highest temperature, 100°.8; pains in back and limbs very severe; throat not sore; no irritation of skin; incubation, almost three weeks.

CASE III.—Violet W., aged 12.

History.—Had measles in 1893.

Present Illness.—On June 26th felt aching and shivery; headache and slight sickness during the day; could not get warm. In afternoon temperature 100°, but after going to bed it rose the same evening to 102°.8. Headache very severe; nausea and retching frequent, but was unable to vomit; skin very hot. Gave her a soda bath, and this caused some slight perspiration, but did not relieve headache much. The temperature, however, did not rise further. Later, sweated profusely, and then slept; breathing rather noisy. Next day, June 27th, temperature 101°, and headache less, but complaining of throat; both tonsils much enlarged, and each with small yellow ulcer on its back part. Bowels inclined to be constipated. One gland especially much enlarged on back of neck; very painful; the whole neck stiff and painful; no marked stiffness in limbs; other smaller glands slightly hard.

There was no appearance of rash whatever, and the throat symptoms gradually improved, and temperature fell to 100°.2 on third day, normal on next day. Urine, normal; no albumin.

Summary.—Two days previous malaise; highest temperature, 102°.8; throat chiefly affected; tonsils enlarged; glands enlarged; no rash at any time, though skin tender; incubation, probably over three weeks.

Miss W. states: Incubation period, 19 days. The only case with which I came in contact occurred at our house 19 days before I developed the rash.

Symptoms.—For four or five days before appearance of rash I had a continuous headache, vague feelings of malaise, loss of appetite, and constipation; headache got worse, and the day before rash appeared there was pain in back and joints. I put it down to cold, due to getting my feet wet. That night headache was so bad I could not sleep; I had several mild rigors; pulse, 120 per minute.

Next morning the rash appeared on chest and neck; the throat was sore, and the headache seemed to extend into back of neck; muscles of neck were stiff; went to medicine examination.

Rash became almost universal during the day, and was of morbilliform variety. Rash

lasted four days; headache and sore throat, three days; pains in back, knees, ankles and wrists throughout the attack. There was slight swelling about the joints, especially the wrists. Tongue, coated; appetite not good throughout the attack. Slept fairly well after first two days. Urine scanty and loaded with lithates. Pulse varied between 110 and 130; temperature not taken, but I felt very hot and feverish. Sequelæ, none, except slight pigmentation for about a week. I had measles in 1883; never had scarlet fever.

Mr. O'N. states: Incubation—Exactly two weeks before the appearance of the rash I visited a case of measles in a child of seven. I came in contact with no other case during that period.

Symptoms, &c.—On the morning of the day preceding the appearance of the rash I was seized with a violent headache, a very unusual thing with me; it persisted, and was accompanied by a certain amount of nausea and loss of appetite. I felt exactly as if I were going to have an attack of influenza; in fact, I put it down as such. That night I did not sleep well, and on getting up next day the headache was still present, and in addition my throat felt dry and sore, and a mild degree of conjunctivitis was plainly noticeable. My body seemed to ache all over; my shins felt as if they had been well kicked; it rather reminded me of how one feels the morning after an extra hard football match. Towards the middle of the day the rash began to appear; first on the side of the neck and face, then on thorax, abdomen and extremities. My skin was hot and dry, yet I felt cold and chilly, and was very loth to leave the fire. By night-time the rash was pretty universally developed. On attempting to walk about I felt quite giddy, so I was forced to go to bed, where I remained for three days.

The next day the rash was more pronounced, but headache was less severe, and appetite began to return. Temperature not taken. On the fourth day the rash had pretty well disappeared except on the extremities, so I got up for a few hours, feeling weak. That night an attack of urticaria, with its accompanying discomfort, added a new feature to the case. Next day I felt as well as ever, and, except for the urticaria, which persisted till the following day, I had no further reminders of the German measles.

The glands were but little, if at all, enlarged during the attack: the rash took the form of oval pink papules closely set; constipation marked. Had measles in 1882.

Mr. G., aged 23, medical student: On Tuesday, May 31st, noticed symptoms ascribed to influenza pain in head and joints; also exceedingly painful shin bones.

Wednesday, June 1st, the symptoms were unchanged; there was, however, an additional symptom in an ordinary sore throat, accompanied by swelling of the cervical glands. As, however, these latter are accustomed to swell on the very slightest excuse, little or no notice of them was taken. Patient took during these two days a good deal of quinine without the slightest apparent effect. He had not laid up in any way. Temperature in the evening was 100°·5.

June 2nd: Symptoms in no way abated; still kept up the quinine treatment. Head aching most awfully; glands enlarged in neck. Towards evening, a rash noticed on face; was ascribed to the quinine, but on reaching home a hot bath was taken as a means of diagnosis, and patient emerged a beautiful cherry red all over—uniform, not spotted. This placed the diagnosis of *rötheln* beyond doubt.

June 3rd: Patient feeling in every way bright, but had perforce to stop away from work for the sake of decency. The whole body was covered with rash, though that on face had disappeared. The glands in neck and axilla were enlarged, those in groin enlarged and painful. Doses of liq. ammon. acet were taken every four hours. Temperature in evening was 99°.

During the following night a constant and most aggravating attack of nettle-rash kept patient awake. In fact, lying in bed was at times impossible.

June 4th: Patient much recovered; hardly a trace of rash left. Attended football in the afternoon, and theatre in evening. Riding home from latter was caught in snow shower. During night had another attack of nettle-rash, which was cut short by sponging back with weak solution of atropine.

Since then the glands have gradually reduced in size; those in the groin being the most persistent, probably aggravated by bicycle riding. For at least a month after the attack the patient was attacked with nettle-rash whenever he got warm. Slight sore throat was felt for a few days.

Mr. McA.: Incubation period not known.

The attack began on Saturday night, when I experienced much the same symptoms as one does in "catching a cold," viz., shivering, coryza, and a feeling of inability to keep warm, etc.

On Sunday morning the coryza had passed off, but there was considerable weakness, which

lasted the whole day. In the evening, while taking my tea, I went off into a "faint."

There did not appear to be any rash about the body on Sunday, but it showed signs of appearing on the face. However, it was not until Monday evening that it was noticed. Then it was well developed on the face and forehead, and showed signs of appearing on the chest.

The rash gradually spread over the whole body, and disappeared in the order it came in about three days.

During the attack my glands seemed universally swollen, especially the submaxillary glands and those at the angle of the jaw, but glands in the axilla and groin showed signs of enlargement.

My throat also was very sore and tender, and gave me considerable pain on attempting to swallow. I should have stated that the left jaw was more swollen than the right, but this may be accounted for by the fact that I had a "wisdom tooth" coming through on the left side. Type of rash, scarlatiniform. I have had the ordinary measles, the attack occurring during an epidemic about 15 or 16 years ago.

Mr. H. states: On Saturday, 11th June, I was diagnosing a patient who lived in the same house and who had measles then. A few days after began to feel slightly out of sorts, not caring to exert myself much, and not caring much for food. This went on until Tuesday, the 28th, seventeen days later. I had rather severe headache, so that I went to bed very early in the evening, being unable to work except a little in the morning.

On Wednesday the headache was worse, being especially so in the back of the eyes, and about the cerebellar region; and I felt very weak, and could not think of trying to do any work, and lay down most of the day. Felt a little fevered, though not much so. Next morning the spots were out on my face, and I had also one or two glands enlarged at the back of the neck on the left side. Then I felt that the glands of axilla and groin were enlarged on both sides. About the neck the glands were much more affected on the left side. Tonsils were also enlarged. When the spots came out I felt much better, though I could eat nothing that morning.

The rash remained until Saturday morning, when it was gone, except a redness on the face. During the time the rash was out pulse was normal, and temperature seemed to be normal, though I did not take it.

Through the attack I felt a soreness in the bones—a soreness which also was felt for two or

three days before the rash came out. The rash was confined entirely to face and neck. Took the temperature of another case in same house, and it was normal when rash was out.

From my own and two other cases in the same house the symptoms seemed to disappear as the rash came out, each one saying the worst time was the day just before the rash came out.

In one case the temperature rose almost to 103°, and the rash covered the whole body; this took two or three days to return to normal, and here the pulse ran up to over 90.

After recovery there was a tendency to a sore throat; this I have seen in all the cases that I have watched. When attack was over I felt fresher and stronger than I had felt for months before.

To sum up, it may be stated:

1. That there has been a widespread eruptive fever epidemic in Dunedin during the last five months, and that it is still active. It has chiefly attacked children, but very many adults have suffered.

2. The eruption has at times resembled both measles and scarlatina, and sometimes both together; but it has never, in my experience, been exactly the same as either. Thus it has not been crescentic like the measles rash, nor so uniformly red as scarlet fever. It is notoriously unsatisfactory to try to convey an impression as to the appearance of an eruption, but I have been especially struck by the number of cases in which the body rash was made up of a number of discrete papules on clear skin; its duration has been from two to four days.

3. A pink eye, or suffused conjunctiva, with some intolerance of light, has been common; but there has been little or no catarrh, as in measles.

4. Enlargement of lymphatic glands has been a constant phenomenon. The situation and number of glands affected has varied; in some only one gland, post nuchal, could be felt to be enlarged, in others all the superficial glands could be felt. In one case only the submental glands seemed enlarged, in another only the right axillary.

5. In a considerable number of cases there has been a post febrile urticarial eruption.

6. Desquamation, branny or scaly, has been common after the attack.

7. The temperature has rarely reached 103°; in one case I have seen it 103°·6.

8. The general constitutional symptoms have been mild, pulse seldom much above normal.

9. The throat has been affected with an inflammatory affection similar to that of the skin, giving rise to subjective sensations of dryness and slight dysphagia.

10. The incubation period has been fixed in many cases at from 14 to 21 days, but never less than 14 days.

11. Many of the patients have already had measles in the 1893 epidemic, or at other times.

12. Slight febrile attacks with enlargement of glands have been noticed, but without the eruption.

13. In none of the cases have there been either pulmonary or renal complications during or after the attacks.

14. The cases have been uniformly benign in character. I have heard of one instance of a young man going to a football match with a well-developed eruption on his face and body. Many children have been found at school with the eruption developed, and most of those attacked have practically had no treatment or after care of any kind. This emphasises the importance of not calling these cases "measles" or "scarlet fever." A like carelessness in such cases would be disastrous, and might easily arise from the popular experience of the mildness of this epidemic.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY,
LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrschmann, R. Bohrschmann, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Foord Hughes (Ashfield), Tayler (Woolahra), Scott (Balmain), Anderson (Petersham), Patrick (Marrickville), J. Murray-Gibbes (North Sydney), Hanson (Waverley). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Brereton (Marrickville).

Wanted copy of *Lancet*, July 24th, 1897. Any gentleman having above for disposal kindly communicate with the Librarian, Editor's Library, 121 Bathurst Street, Sydney. Tel. 2027.

AUSTRAL CYCLE AGENCY.—Perhaps there is no cyclist who requires to give so much attention when buying a lamp, as a medical man, who, after being called out hurriedly at night-time, chooses his bicycle as being the easiest and quickest means of reaching his patient; and this very often happens on nights which are exceedingly dark when a good and reliable lamp is essential. Amongst the many lamps on the market, the "Silver King" is one worthy of notice. It is a lamp which gives a very bright light, and can be quickly lighted and easily cleaned. These lamps, we have ascertained, can be purchased at any of "The Austral Cycle Agency's Depots which are spread throughout the Colonies; their Sydney address is 391 George Street, and their Melbourne Depot is at 139 Elizabeth Street. The price of the "Silver King" we believe, is only 12s. 6d. Another good lamp at about the same price is the "Dunlop." No doubt this Company will be pleased to give fuller particulars to anyone writing to them.

WIDAL'S REACTION AS A TEST FOR TYPHOID FEVER.

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It is not my intention in the present paper to give a resumé of all the work which led up to the discovery of this test, but rather to briefly describe its nature, and to point out some of the difficulties that one meets with in employing it, and to give an account of our experiences with it in the Pathological Department of the Sydney Hospital.

It may, I think, be said with all justice, that no discovery in the whole realm of bacteriological science, with the single exception perhaps of that of the tubercle bacillus by Koch in 1882, will prove of greater practical value to the clinician than that which was made independently in 1896 by Widal and Grunbaum, and which bears the name of the former by reason of a few weeks priority of publication.

I intend to record only the results obtained during the past few months, as those obtained at the earlier periods of our investigations are somewhat doubtful, owing to there being some dubiety as to the purity of the culture of bacillus typhosus with which we were working.

The first, and by no means the smallest, difficulty one meets with in carrying out this work is the separation from the spleen of a typhoid patient of a pure culture of the bacillus typhosus.

This may be done either during life by drawing off by means of an exploratory syringe a portion of blood from the spleen, or by separating the organism from the spleen or mesenteric glands after death.

The difficulty of separating the organism from the fæces is so great that this method may be discarded as almost impracticable for ordinary purposes.

The separation is carried out in the ordinary way by means of plate cultures.

Having in this way obtained a pure culture of the organism, a tube of peptone bouillon is inoculated with the growth, and incubated for 24 hours at 37° C.

By the end of that time (or, as a matter of fact, in a few hours) the serum, from being clear, assumes an opalescent appearance, and on examining a drop under the microscope the organisms are found in an actively motile condition.

Before we are quite satisfied as to the purity of the growth certain tests have to be satisfied.

The tests are those which distinguish the bacillus coli communis from the bacillus typhosus, and they are as follows :—

1. Both organisms are motile and flagellated, but the flagella of the B.T. are more numerous than those of the B.C.C. and the movements of the former are of a far wider range than those of the latter.
2. The B.C.C. produces fermentation in media containing various sugars (levulose, arabinose, and glucose) with much greater facility than does the B.T. The B.C.C. produces coagulation in milk while the B.T. does not. This is *probably* due to the fact that the lactose of the milk is fermented by the action of the B.C.C. and the lactic acid set free precipitates the casein.
3. B.C.C. produces, during its growth in ordinary media, acid at a much greater rate than does the B.T.
4. If two tubes of liquified gelatine-bouillon medium be inoculated, the one with B.C.C. and the other with B.T., and the resulting mixture be shaken up so that the organisms are uniformly mixed with the medium, it will be found in the course of a few days that the B.C.C. tube will show bubbles of gas interspersed throughout it, while the B.T. tube will merely show a general turbidity.
5. The *Indol reaction* : During its growth in bouillon culture medium the B.C.C. produces the substance known as indol; the B.T. on the other hand does not. This substance, which is also formed naturally in the lower part of the human intestines, may be detected by the following test :—To the culture (about four days old) 1 c.c. of a .021 % solution of pot. nitrite (according to Kitasato) and subsequently a little concentrated sulphuric acid are added. At the line of junction of the two fluids a compound of indol and nitrous acid is found which has a pink colour. This is one of the most distinctive tests between the B.C.C. and the B.T., but it is liable to one source of fallacy, viz., that some of the varieties of B.C.C. also fail to produce it.

6. Another test, and this one is regarded by most authorities as the most conclusive of all, is the peculiar reaction that occurs when a little of the blood serum of a patient suffering from typhoid fever is mixed with an actively motile young culture of the B.T. This reaction I will describe immediately. No such reaction occurs with any of the varieties of the B.C.C.
7. In all kinds of artificial media the growth of the B.C.C. is more rapid and vigorous than that of the B.T.
8. On fresh potatoes with an acid reaction B.C.C. forms at first an opaque white growth, which after a few days assumes a brownish colour. Whereas, the B.T. grown under similar conditions produces a growth which is almost invisible, and can only be seen on looking sideways at the preparation.

These then are the most important of the features that distinguish the cultural peculiarities of the B.C.C. from those of the B.T.

While engaged in working at this subject in the latter months of last year I discovered a still further test which is of ready applicability, and which, as far as I can ascertain, is equally distinctive.

Finding that in most cases of cystitis associated with the occurrence of fœtid urine that the prevailing organism was the B.C.C., it occurred to me that it was owing to the growth of this organism that the ammoniacal decomposition of the urine was due.

Acting on this presumption, I had a number of tubes containing sterilised healthy urine inoculated with B.C.C., and a similar number with B.T. These were incubated at 37° C.

In the course of a few days it was found that all of the former had the characteristic odour of ammoniacal urine, while the latter were free from any such change even for weeks after inoculation.

Having now described the methods of distinguishing a culture of B.C.C. from one of B.T., I will now describe what is known as Widal's Reaction.

Method.—A 24 hours old pure culture of the B.T. in peptone bouillon having been obtained, a drop is examined under the microscope, and the characteristic movements of the organisms noted.

This slide is kept as a control with which the reaction may be compared.

It has been found by experiment that the reaction is most satisfactorily carried out by

diluting the blood serum, and for all practical purposes it is found that a dilution of 1 in 10 answers best.

To obtain this nine loopsful of the culture are placed on a thoroughly cleansed thin cover slip, and to this is added a single loopful of the blood serum of a suspected case.

The blood serum may be conveniently obtained by withdrawing from the cleansed finger-tip of the patient about four or five drops of blood and allowing this to stand until a drop of serum separates from the resulting clot.

If the case be one of typhoid it is found that the movements of the organisms rapidly diminish in range until in a short time they become motionless and clumped together in masses.

This result is obtained in a time varying with the character of the case—in some cases, and in our experience this is in the early days of the disease, the clumping can be observed almost immediately the preparation is examined, while in others it takes 15, 20, or even 30 minutes before the reaction is completed.

For purposes of accuracy it has been found necessary to establish a time limit within which the reaction should take place and the limit adopted by most observers is from 20 to 30 minutes.

If no reaction occurs within that time the reaction is regarded as negative.

A positive reaction has been obtained in many cases with the blood of patients who have suffered from typhoid fever years ago, and in our results reference is made to these.

One of the great disadvantages, from the standpoint of the ordinary clinician, of this test is that it can only be applied properly in a bacteriological laboratory.

To the *British Medical Journal*, published May 15, 1897, however, Professor Wright and Surgeon-major Semple, of Netley Hospital, contributed an article in which they stated that Widal's reaction could be obtained equally well with dead cultures of the B.T.

(Similar results were also obtained by Widal and were published by him in the *Presse Medicale*, of September 30th, 1896.)

If this be true then the reaction may be readily carried out by medical men in their consulting rooms.

The method adopted by these observers was to expose cultures of living B.T. to a temperature of 60° C. for from five to ten minutes, and then allow them to stand for from three to nine weeks. They were then shaken up thoroughly, and the test applied in the usual manner.

We have applied this method in the Pathological Department of the Sydney Hospital, but so far not with uniform success.

However, we intend prosecuting an inquiry into this question, and should our results be successful I will make a communication on this subject at a later date.

I will now briefly summarise the results of our experiences with this test:

In applying the test a time limit of half-an-hour was observed, and a dilution of 1 in 10 of a 24-hour old broth culture.

In all I have records of 45 patients upon whom the test was used. Of these 18 were undoubted cases of typhoid fever, and in all of these a positive reaction was obtained.

As most cases of typhoid only come to hospital some considerable time after the onset of the disease, it is impossible from such cases to tell how soon after infection the blood serum will give the reaction.

Of these 18 cases the reaction was obtained for the first time at dates varying from the eighth to the fiftieth day after onset of symptoms.

In some cases occurring in my private practice I have obtained the reaction within the first week after the onset.

Another question of some importance, but which we are not yet in a position to answer positively, is: "How long does the blood serum retain this property of producing loss of motility and clumping in typhoid organisms?"

In some of the cases we find that the reaction on admission has been feebly positive, but strongly so within a few days.

On the other hand, in one or two cases the reaction when first tried was strongly positive, but gradually became less so, till in one case within three months it had entirely disappeared.

As several of the members of the nursing staff of the Sydney Hospital have had attacks of typhoid, I thought it advisable to apply the test to them, and with the following results:

Sister J. had a severe attack of typhoid ten years ago: Her blood gave a negative result after half-an-hour's exposure.

Nurse F. had typhoid six years ago: Her blood gave a positive reaction in ten minutes.

Sister N.—Typhoid five years ago: Positive reaction in ten minutes.

Nurse S.—Typhoid two years ago: Gave a positive reaction in three minutes.

Nurse B.—Typhoid nine months ago: Gave a positive reaction in ten minutes.

A patient in one of the wards who was said to have had the disease 30 years ago gave a negative reaction.

The test was also applied in a number of diseases other than typhoid, some of which in clinical character are at times difficult to distinguish from typhoid.

In all of these a negative result was obtained after half-an-hour's exposure.

The diseases referred to were: Abscess of liver following appendicitis, beri-beri, influenza, influenzal pneumonia, acute tuberculosis, acute rheumatism with hyperpyrexia, malaria, pneumonia (two cases), pneumonia with pneumococcal synovitis, empyema (two cases), phthisis pulmonalis et intestinalis, phthisis with tubercular appendicitis, septicæmia after abdominal section, pyæmia after abortion, pleurisy with effusion, gonorrhœal synovitis.

One case, however, presented some of the features of typhoid, but gave a negative result.

As it is a case of some interest I will briefly give the details of the attack.

This patient was admitted to the Sydney Hospital on the 29th May of this year, having felt out of sorts for 10 days, five of which had been spent in bed. The illness came on insidiously, with general lassitude and inaptitude for work. He also complained of headache and had a slight cough. His bowels were fairly regular. His tongue was moist and well furred, especially at the sides. Pulse 96, respiration 24. On the abdomen and chest some spots, which the resident physician describes merely as being "suspicious," were found. There was no tenderness or distention of the abdomen. Nothing abnormal was discovered in the condition of either heart or lungs. Urine 1020 acid, no albumen, sugar, bile or blood.

The temperature, which on admission was 102° F., ranged between that point and normal for four days, the rise of temperature being an evening one. For the remainder of his stay in hospital it was on one occasion only as high as 99° F., but for the most of the time it was somewhat subnormal.

Widal's test was applied on the second, and again on the nineteenth, day after admission, but on both occasions with negative results.

You will, I think, agree with me that the clinical features of this case are quite in keeping with certain forms of influenza seen particularly during the epidemic of this year.

It is true that the aspect of the patient and the character of the onset of the illness were in some respects suggestive of typhoid, but the bulk of the evidence clinically was against that diagnosis, and the negative test given by Widal's method is, I think, proof of this.

From the results I have detailed to you of our own experience with this test and from the uniformly encouraging results recorded by others, we are, I think, in a position to conclude that this is without doubt one of the most reliable and useful tests for the presence of typhoid hitherto discovered.

In conclusion, I wish to acknowledge with gratitude the assistance afforded me in this work by my assistant, Dr. Isbister, and by his predecessor, Dr. McClelland, now Medical Superintendent of the Sydney Hospital.

CHLOROFORM SYNCOPE.

BY THE HON. W. F. TAYLOR, M.D., Q. UNIV.
CANADA, M.R.C.S. ENG., P.D.H., M.L.C.
BRISBANE.

I AM induced to bring the subject of chloroform syncope before you this evening, not because I have anything new to impart respecting it, but because I consider the subject is one which we have not yet quite got to the bottom of, and therefore, the more it is ventilated and discussed, the more likely we shall be to obtain further information, and a more accurate knowledge concerning it. Chloroform is a valuable friend to suffering humanity, but it requires to be treated with careful consideration in order to prevent it becoming at unexpected times a deadly foe. About three years ago I read notes of two cases of chloroform administration before the members of this Branch at one of the monthly meetings. Syncope occurred in both cases under two apparently opposite conditions—viz, anæmia of the medulla, and venous congestion of that organ. I will briefly recapitulate the main features of each case. The first was a young man, about 27 years of age, who required to have some teeth extracted. He had breakfasted at 8 o'clock, and arrived at the dentist's rooms at 11.30, having taken a considerable amount of exercise during the interval. On examination the heart sounds were found to be normal, and there being nothing apparently to cause any undue risk, except the probability of the breakfast not having passed out of the stomach, he was placed in the horizontal position, with the head somewhat lowered, and the chloroform administered. This he took remarkably well, without any struggling or disturbance of the respiration or circulation, and soon became insensible. The gag was placed in his mouth, and three teeth were rapidly extracted, when suddenly the pulse flickered and stopped, and, after one or two feeble attempts at respiration, the breathing ceased, the pupils being widely

dilated, eyes half open, face deadly pale, and finger nails blue. I was able to note these symptoms pretty accurately, for while the dentist was operating I stood on the left side of the patient, holding the left hand, and feeling the pulse. The head was immediately lowered so as to hang over the head rest, artificial respiration was resorted to, ether was dashed over the abdomen, and nitrite of amyl applied to nostrils. After what appeared to be a considerable time a slight reddish tinge appeared in the lips, feeble attempts at respiration were made, which becoming stronger, the breathing was in a short time re-established, and the heart's action fully restored. Two more teeth were extracted before he became sensible, and he vomited up a quantity of meat in large lumps, together with bread and other ingesta.

The second case was that of a man 50 years old. His pulse was tolerably strong and regular, but the heart sounds were somewhat faint, consequently I gave him a glass of whisky before proceeding to administer the chloroform. In this I was also influenced by the fact that my patient had the appearance and also the history of having been accustomed to the free use of alcoholic drinks. I believe it is pretty generally admitted that old toppers take an anæsthetic, especially chloroform, more quietly if a stiff glass of grog is given them beforehand. At all events, that is my experience. After a few inhalations he held his breath and commenced to struggle violently, his face becoming purple and swollen, the eyes protuberant, and the temporal and external jugular veins standing out in bold relief. Suddenly the struggling ceased, and I at once removed the mask and pressed the lower jaw forward, when he took two or three deep inspirations with a considerable interval between them, and all attempts at breathing stopped, the face being livid, eyelids half open, and pupils widely dilated. The pulsation of the temporal artery ceased almost simultaneously with the breathing. Artificial respiration was at once commenced, the head was raised, and whisky injected hypodermically, ether not being available. Considerable time elapsed before any attempt at respiration was made, in fact the case seemed almost hopeless, when, the face becoming less swollen and congested, feeble gasps were made, which, becoming stronger as the face got paler, the respiration and heart's action gradually became fully restored.

These two cases may be regarded as fairly typical of the two conditions usually met with in chloroform syncope, and the questions arise :

- (a) What are those conditions due to ?
- (b) How can they be best avoided ?
- (c) How can they be most successfully treated ?

(a) The first class of cases is usually ascribed to anæmia of the medulla, induced by a gradual fall of arterial pressure. This diminished arterial pressure is due to the paralyzing action of the chloroform on the vaso-motor centre and automatic ganglia of the heart. Vagus inhibition is said to be of no importance as an agent in the production of chloroform syncope. With diminished arterial pressure and its accompanying anæmia of the medulla, the respiration becomes slow, shallow, and irregular, due in part to stimulation of the respiration-inhibitory centre, through irritation of the terminal fibres of the superior and inferior laryngeal nerves distributed to the mucous membrane of the larynx, and to irritation of the terminal fibres of the trigemini in the nasal mucous membrane, by the chloroform, and in part to exhaustion of the respiratory centre through over-stimulation by imperfectly aerated blood when enfeebled by an insufficient arterial supply. In the first case mentioned, the irritation of the fibres of the maxillary nerves, caused by the extraction of the teeth and the distended condition of the stomach, interfering as it must have done to some extent with the free descent of the diaphragm, contributed very materially to cause the arrest of respiration, while the state of the stomach would also aid in impeding the heart's action. These were no doubt important factors in causing the syncope in this particular instance, but cases may occur after careful preparation, and quite irrespective of the nature of the operation, or, in fact before any operative proceedings have been commenced. Three well-marked cases of this class of syncope have come under my observation since the one related. The first was that of a baby twelve months old, who was about to be circumcised. He cried and struggled at first, but soon became insensible, and the operation was proceeded with. Becoming restless, the chloroform was somewhat freely administered, and the operation completed, when the respiration became feeble, and ceased abruptly, the pulse stopping at about the same time (so far as could be ascertained), the face becoming very pale, and the pupils widely dilated. Artificial respiration, with the head lowered, restored the child after a considerable time had elapsed. The syncope in this case was no doubt caused by an overdose of chloroform.

The second case was that of a boy 8 years old, who was going to be operated on for post-nasal adenoid growths. He had had no food that morning except a cupful of milk and water and some bread and butter at 8 o'clock, and was chloroformed at 11.30. During the operation he struggled a good deal, but remained quiet for some minutes after, the pulse and respiration being good. Both, however, soon became feeble, and ceased almost simultaneously. Artificial respiration was at once resorted to, ether was injected hypodermically, and nitrite of amyl applied to the nostrils, the head being lowered. The case looked very bad for some time, the face being deadly pale, and the pupils widely dilated. However, the pulse and respiration became re-established for about five minutes, when another attack of syncope occurred, and a considerable interval elapsed before the breathing and heart's action were fully restored. The condition in this case was possibly due more to the operation than to the direct effects of the chloroform, and might have been avoided had the child been more fully under the influence of the anæsthetic. I have, however, frequently seen chloroformed children struggle when being operated upon for post-nasal growths, but this is the only instance of syncope that I have witnessed.

The third was that of a man, aged 50, who was about to undergo Arlt's operation for entropion of the upper eyelids. He took the chloroform without any undue struggling, but towards the end of the operation on the second lid I noticed his face and lips getting very pale, and drew the chloroformist's attention to his appearance. The breathing ceased after a few feeble respirations, and the pulse stopped at about the same time. Artificial respiration was at once resorted to, the operating table was raised at foot, nitrite of amyl applied to the nostrils, and ether injected under the skin. The respiration and pulse were soon re-established. In this case the condition of syncope was no doubt due to the direct effects of the chloroform. The patient was carefully prepared for the anæsthetic.

The second class of cases is attended with violent struggling, holding the breath, increased intra-thoracic pressure, congestion of the venous system, and lowering of arterial tension. Suddenly the struggling ceases, the muscular system becomes relaxed, a few deep inspirations are taken, and the pulse and breathing cease. Asphyxia, caused by venous hyperæmia of the medulla, and exhaustion of the respiratory centre by the overstimulating

effects of blood deficient in oxygen and surcharged with carbonic acid gas circulating in the medulla, has usually been considered to be the cause of the syncope in these cases, but paralytic dilatation of the heart is stated by Hare and Leonard Hill to be the principal source of danger. According to the latter, "In the first stage the left heart becomes impoverished; in the second stage it is suddenly filled with blood. This is drawn from the lungs, and is full of chloroform. The chloroform passes into the coronary arteries, and the heart is thrown into paralytic dilatation. Respiration and the pulse either cease simultaneously or the pulse before the respiration." That chloroform may, and does produce a paralytic effect on the heart by its action on the automatic ganglia, may be readily conceded, but that the heart condition is the sole cause of the syncope, as these gentlemen appear to infer, is, I think, open to question. In cases of this sort I have always noticed that so long as the venous congestion of the face and head continues, efforts at resuscitation are unattended with success, but on taking advantage of the effects of gravitation by raising the head, the breathing and pulse become re-established, thus showing that until the congested state of the medulla is relieved, the respiration and circulation remain in abeyance, notwithstanding that artificial respiration and other means are vigorously employed to restore the patient. Hill recognises the value of raising the head in these cases, but apparently limits the effect to the heart. He says, "Artificial respiration established with the patient in the horizontal position is the treatment indicated in this form of syncope. The heart should be rhythmically compressed by squeezing the thorax. If this does not quickly renew the pulse the patient should be placed in the vertical feet-down position. The dilated right heart is thereby completely and easily emptied of blood into the abdominal veins. Artificial respiration is maintained during this manœuvre, and the patient is brought once more into the horizontal position. By rhythmic compression of the chest, an efficient circulation is maintained through the coronary arteries, by first emptying and then refilling the heart, a fresh supply of blood is brought into that organ. If this does not prove successful on the first trial it can be repeated."

(b.) How can chloroform syncope be best avoided? is a very important question. When possible, the patient should be prepared beforehand. A sufficient time should be allowed to

elapse since the last meal to insure a comparatively empty state of the stomach, but a prolonged fast ought to be avoided. If any weakness of the heart exists an alcoholic stimulant may be administered before commencing to give the anæsthetic. In the case of old toppers it prevents, to a great extent, the struggling which is so prevalent with this class of patients. A hypodermic injection of strychnine, sulphate of atropine, or sulphate of sparteine is also a valuable cardiac stimulant. Care should be taken that the breathing is not in any way impeded. The inhaler should be held some inches from the mouth or nose, so that the chloroform may be well diluted with air, and the sense of suffocation, which is so trying to the patient, and so provocative of struggling, prevented. In the *Nineteenth Century*, of March, 1898, Mrs. E. A. King gives a graphic description of the different effects on herself of inhaling chloroform well diluted with air, and in a more concentrated state. She says:—

"It is the custom of many practitioners in England (I speak only from my own experience) to administer chloroform in direct opposition to the principles laid down by the Hyderabad Commission, and to the way practiced in India. There, the primary consideration is that nothing shall in any way impede the patients breathing, and the operator, consequently, takes care never to place the pad or handkerchief very close to the mouth, holding it invariably at a distance of some inches, so that the chloroform may be freely diluted with air. In this way I have taken it some half-a-dozen times, and far from having experienced the slightest distress. I found the sensation exceedingly soothing and agreeable as long as consciousness lasted. In England my experience has been far otherwise, and my dread of taking chloroform is now almost as great as the dread of being smothered or drowned. Having suffered great distress the first time, I entreated the administrator on the last occasion to allow me air the whole time, telling him how greatly I dreaded the feeling of suffocation I experienced. He merely answered, somewhat testily, that I must allow him to act as he thought best, and those present assured me in chorus that he was one of the best chloroformists in London. I was helpless and I submitted. At first he held the hollow pad some inches from my mouth, and I inhaled the fumes with perfect ease and comfort, drawing deep and regular inspirations, but no sooner was I half-unconscious than he clapped the pad over my mouth and nose in the way I had so dreaded. I struggled furiously for breath, but could inhale nothing but the choking burning fumes of

the chloroform that felt as if pure alcohol were being poured down my throat, and made me gasp and choke in an agonised manner. I became frantic in my efforts to obtain air, and the few moments that elapsed before unconsciousness came to my relief were to me a prolonged agony."

The inhaler should be removed during the struggling of the patient, or when the respiration is of irregular depth; both breathing and pulse should be carefully watched, and on the first indication of failure of either the inhaler should be removed, and restorative measures employed. The purity of the drug should, of course, be ascertained. As a rule, the article of well-known manufacturers may be accepted without misgiving, but perhaps it is not generally known that chloroform may deteriorate or develop certain irritating properties when exposed to the air. Wm. Ramsay, the writer of an article in the *Nineteenth Century* of April, 1898, on chloroform and ether, says: "Chloroform is a compound of hydrogen and chlorine (C_2HCl_3). The atmospheric air contains oxygen. When the bottle is opened the oxygen of the air causes hydrochloric acid gas to be formed, and itself takes the place of this compound, producing a substance named carbonyl chloride, which decomposes on contact with the moisture of the mouth, causing HCl and CO_2 ."

"Exposure of ether to the air causes a sharp smelling compound, composed probably of peroxide of ethyl. It provokes coughing and a disagreeable taste. A little slaked lime in the chloroform bottle will remove the HCl , and destroy the carbonyl chloride; and a little mercury in the ether bottle will become oxidised by the peroxide present in the ether."

(c) How can cases of chloroform syncope be most successfully treated?—In the first class of cases due to anæmia of the medulla induced by a gradual fall of arterial pressure, artificial respiration should be at once resorted to, and the head lowered and feet raised. Nitrite of amyl may be applied to the nostrils and hypodermic injections of ether given, but the latter cannot be productive of any results while the circulation is at a standstill; once started, however, ether and nitrite of amyl are valuable assistants in maintaining the heart's action. The tongue should be pulled well forward, and rhythmic traction of it may be tried. (Artificial respiration is not quite free from the danger of aspirating some of the contents of the stomach into the air passages.—*Vide British Medical Journal*, October 23rd, 1897, and *Therapeutic Gazette*, March, 1898.)

In the second class of cases, whether due to asphyxia, paralytic dilatation of the heart, or to both combined, the head should be at once raised and artificial respiration with compression of the chest-walls adopted, the tongue being pulled well forward; and failing rapid blanching of the face, the feet-down position recommended by Hill should be resorted to. This position should, however, only be maintained long enough to cause a decided paling of the face, otherwise the opposite condition, viz., an empty heart with an anæmic medulla will be established. Inversion, or the feet-up position, or compression of the abdomen, if adopted in the first instance, will increase the venous hyperæmia of the bulb and the paralytic condition of the heart, but may possibly become necessary if the feet-down position has been too long maintained—a contingency that should be avoided. It will be seen, therefore, that the position of the patient's body plays an important rôle in the treatment of this class of cases. Ether may be given hypodermically, and nitrite of amyl to the nostrils may be used with advantage provided the congested condition has been removed. Faradism will not be of any use either in this or the first class of cases where artificial respiration and position have failed, but it might be of use in stimulating the heart to contraction if applied without interfering in any way with the other treatment.

To sum up, the following are the main points to be attended to in the administration of chloroform:

- (1) The condition of the patient.
- (2) The mode of administration of the anæsthetic.
- (3) The effects of the anæsthetic, and
- (4) The methods of treating the two forms of syncope.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 30th September, at 8.15 p.m.

Business:—Election of Councillor. Discussion on the prevailing epidemics of measles and influenza.

W. H. CRAGO, Acting Hon. Secretary.

We have received from MESSRS. FLETCHER, FLETCHER & Co., of Holloway, London, N., and 18 O'Connell Street, Sydney, samples of their Vibrona Champagne, upon which we shall report in our next issue.

SOME NOTES ON THE PATHOLOGY AND TREATMENT OF ACUTE BRONCHITIS AND BRONCHOPNEUMONIA IN YOUNG CHILDREN.

By R. R. STAWELL, M.D. (MELB.), D.P.H. (LOND.), HON. PHYSICIAN OUT-PATIENT DEPARTMENT MELBOURNE CHILDREN'S HOSPITAL; HON. PATHOLOGIST ST. VINCENT'S HOSPITAL, MELBOURNE.

WITHIN recent years some change and definite advance has been made in our knowledge of the pathology of acute pulmonary diseases, and some change and apparent improvement has been effected in the treatment of these affections in childhood. In order that the question of treatment may be more efficiently considered it would be well first to deal with some points concerning the anatomy and pathology of the pulmonary organs.

As regards both its gross and minute anatomical structure, the lung of a young child differs in some respects from the adult lung, and these differences, slight though they may appear, undoubtedly have a great influence in bringing about the serious and oftentimes fatal progress of inflammatory changes in the lung.

(1.) In a child the bronchi are relatively larger, are more numerous and relatively occupy a greater space in the thorax than in an adult. Absolutely, of course, the diameter of the bronchi is much smaller in the child than in the adult, so that in early life any pronounced swelling of the mucous membrane of a smaller bronchial tube is apt to obstruct more or less completely the entrance of air or the expulsion of secretion. In Lauder Brunton's "Lectures on the Action of Medicines" it may be remembered there is a diagram which illustrates very clearly the great difference in the effect produced by the swelling of the mucous membrane in large and small bronchi.

(2.) As compared with the adult, the mucous membrane lining of a bronchus of the child is very loosely attached to the subjacent firmer tissues, and its capillaries are very prominent. This combination of conditions renders the bronchial mucous membrane in a child peculiarly prone to become swollen or engorged on irritation of any kind.

(3.) Associated with these minute anatomical peculiarities, there is, in addition, in the child great irritability of the involuntary muscular fibres, which, as the muscularis mucosæ exist down to the smallest bronchiole and infundibulum. Marked muscular spasm, therefore,

may be regarded as an aggravating factor in the bronchial obstruction of bronchitis, and may be compared to the more pronounced spasm of the adductor muscles in laryngitis in young children.

(4.) In relation to the bronchi, the air cells in the child are much smaller and occupy less space, but their walls are relatively thicker than in the adult, and the epithelial cells are more numerous and more active. In consequence of this limited space of the alveoli, "active congestion," as Holt says, "may interfere with their function almost as completely as does consolidation."

(5.) Throughout the lung, also, the interstitial tissue is present in a larger amount than in the adult. In short, peculiar arrangements may be said to exist in the child for the accumulation of inflammatory products in the bronchioles, infundibula and alveoli, together with an easy passage for the spread of inflammation to the peri-bronchial tissues.

(6.) In addition, the thoracic walls in a young child are very elastic and yielding, a condition which permits the chest to sink in readily from atmospheric pressure whenever there is obstructive dyspnoea. This tendency to collapse of the chest-wall is markedly aggravated in cases of slight rickets, a condition very prevalent in this city. In cases of post-nasal growths, as I have on another occasion pointed out, the collapse and deformity of the chest have already taken place, and acute pulmonary attacks are thereby rendered the more serious.

In connection with these anatomical peculiarities of the lungs and chest of a child, I may point out at once the lesson to be learnt from their considerations. While the bronchial mucous membrane is engorged or actively congested, while obstruction to the passage of air exists as evidenced on auscultation by rhonchi, it is unwise to administer any of these drugs, which can be classed as "stimulating expectorants." That there is a great tendency to give in all cases of bronchitis in infants and young children a stimulating cough mixture cannot be denied. In these cases it is recognised by the practitioner that the child is feeble perhaps, and that the condition may pass on to a broncho-pneumonia, and it is reasoned that, therefore, nothing but a stimulating form of "expectorant" treatment should be adopted, even from the first. Practically nothing, in my experience, could be more unwise, for the result of such treatment is that the mucous membrane becomes more intensely congested, and there

comes about in parts of the lungs something like complete obstruction to the entrance of air through the bronchioles, with accumulation of catarrhal products in the alveoli. Further, even when on auscultation there are moist râles associated with rhonchi, the usual conditions to be heard in the bronchitis of a child, stimulating expectorants should be withheld, lest they produce excessive engorgement in some parts of the bronchial tract. Of course in the treatment of bronchitis in adults the administration of stimulating expectorants in what is called the "first stage" of the attack is never contemplated. Fothergill and Lauder Brunton, in their well-known works, illustrate with picturesque anecdotes the inadvisability of such medication. In children, however, the division between the first and second stage in bronchitis is very difficult to observe, and in some cases it can hardly be said to exist. Certain it is that rhonchi can be heard for days, or even weeks, continuing in the one attack of cold on the chest, and I have witnessed a bronchitis in a child with scattered râles about the chest, progressing to recovery, suddenly become very much worse, with sonorous and sibilant rhonchi, after the exhibition of a mixture containing senega and ammonia. That the tendency to unwisely dose these cases is very general may be gathered from the vigorous statements of Eustace Smith: "Too early stimulation in certain diseases, such as bronchitis and croupous pneumonia, will be found merely to increase the severity of the inflammation, and may by itself be sufficient to determine the fatal issue. In bronchitis especially, death has, I believe, been often caused in young children by a too early administration of carbonate of ammonia." Again he writes: "The rule cannot be too rigidly followed, that in an early stage of pulmonary catarrh, while the bronchial mucous membrane is much swollen, and before secretion has become free, all stimulating expectorants are injurious. At this stage, ammonia, squill, tolu, and the other bronchial stimulants only make the cough harder and aggravate the irritation which it is our object to allay. In an early stage of the disease, when the oppression of the chest is great and the dyspnoea troublesome, such treatment only increases the distress of the patient and promotes the extension of the bronchitic inflammation to the air-cells. Many a case of catarrhal-pneumonia has owed its origin to no other cause than injudicious treatment of a pulmonary catarrh."

Before dealing further with the question of the treatment of bronchitis, I will pass on to

the consideration of the pathology of croupous pneumonia, or catarrhal or broncho-pneumonia.

Concerning croupous pneumonia, it can now be said that it is a specific infectious fever, caused by the pneumococcus, and accompanied by a local lesion on the lungs. The evidence concerning the definite microbic origin of the disease is so strong that most of the more recent clinical writers accept the view that the pneumococcus is just as truly the cause of croupous pneumonia as the Klebs-Löffler bacillus is the cause of diphtheria. It has been compared by one graphic writer to typhoid fever, and years ago even, Austin Flint suggested that it should be called "pneumonic fever." In the light of this knowledge, that pneumonia is a definite self-limited specific fever it may be hoped that there will be a general reconsideration of the plan of treatment and that indiscriminate expectorant drugging may give place to the broader therapeutic measures by which the toxæmia of a specific fever may be combated. Attention may be called to an important fact, emphasised recently by one or two writers, that the dyspnoea and rapidity of respiration are not due to consolidated lung tissue offering mechanical interference with respiration or circulation, but are due to the effect of the special pneumo-toxin upon the cardio-respiratory centres. Osler writes: "Very large areas of the breathing surface may be cut off without seriously disturbing the cardio-respiratory mechanism. In no way is this more strikingly shown than by the condition of the patient after the crisis. On one day, with a lung consolidated from apex to base, the respirations at 60 to 65, the pulse 120, and the temperature between 104° and 105°, the patient may seem in a truly desperate condition, and it would appear rational to attribute the urgent dyspnoea and the slight cyanosis to the mechanical interference with the interchange of gases in the lungs. But on the following day the dyspnoea and the cyanosis may have disappeared, the temperature is normal, and the pulse rate greatly lessened, and yet the physical condition of the lungs remains unchanged. We witness no more striking phenomenon than this in the whole range of clinical work, and its lesson is of prime importance in this very question, showing that the fever and the toxins rather than the solid exudates are the essential agents in causing the cardio-respiratory symptoms."

After the success which attended the bacteriological investigations concerning croupous pneumonia, similar methods were used in searching for the cause of broncho-pneumonia, and quite recently, May 28th, 1898, there was

published in the *British Medical Journal* a clinical lecture by Dr. Samuel West, in which the pathology of one form at least of broncho-pneumonia was admirably expounded. The lecture was delivered to show that pneumococcal pneumonia in a young child took the lobular and not the lobar form. This view had last year been stated by Emmett Holt in his work on "Diseases of Infancy and Childhood," and was supported by some investigations by Dr. Martha Wollstein. Although it has been usually held that the occurrence of broncho-pneumonia was always secondary to some specific fever such as measles, or pertussis, or to some definite catarrhal conditions of the bronchial tubes, yet it has been recently pointed out that in a certain large number of cases the disease appears as a primary condition. Broncho-pneumonia as a primary disease is found as a rule only in the very young, in children under four years of age, and in some of these cases it simulates very closely the clinical features of a croupous pneumonia. Dr. Wollstein made investigations of 33 cases of broncho-pneumonia, 19 of which were primary and 14 secondary. Of the primary cases the pneumococcus was found in 17 cases, as a pure culture in nine, associated with the streptococcus in seven, and with the staphylococcus in one. The streptococcus was found alone in one case, and associated with the staphylococcus in another. Of the 14 secondary cases, the pneumococcus was present in 11, but was only found in two cases as a pure culture. Concerning the bacteriology of broncho-pneumonia, Holt summarises the facts as follows:—"In the primary cases the pneumococcus is nearly always present, and in a large proportion of cases it occurs alone. The secondary cases are usually due to a mixed infection. The pneumococcus is found in a large number of these cases, but plays a less important part than the streptococcus, particularly in cases complicating measles, diphtheria, and scarlet fever."

The relative prevalence of broncho-pneumonia as a primary and secondary disease is difficult to estimate, and must vary in different years. During this season, here in Melbourne, the large majority of my cases have seemed to be secondary to the bronchitis of measles, but in a certain definite number of infants broncho-pneumonia has suddenly developed with practically no previous history of cold or coughing.

I have dwelt at some length upon the fact that a primary broncho-pneumonia must be recognised, and that it may be looked upon as an acute specific fever, comparable to croupous pneumonia. I have done this purposely, because I have been impressed each year more

and more with the importance of treating the child with a broncho-pneumonia as if the case was one of a severe specific fever rather than a lung case. In short, I may say, I have never seen any appreciable benefit from the most artfully compounded stimulating expectorant mixture, but, on the other hand, I believe that in many cases a very serious condition has been induced by such dosing. I recognise that there is a great difference between a primary pneumococcal broncho-pneumonia and a croupous pneumonia, in so far that in the former, quite apart from the absorption of the specific toxin, there is a real dyspnoea due to the obstruction existing in the bronchi and bronchioles; this is evidenced by marked recession of all the soft parts of the child in inspiration. In such cases an efficient expectorant would be most desirable and useful, but I know of no single drug or combination of drugs which could be said to serve this purpose. One must agree with Osler when he says, "Expectorants are rarely of any value in pneumonia. If anyone wishes to be convinced of the futility of such remedies let him study their action in a series of cases of sthenic pneumonia, in which it would be a real gain to loosen the cough and give to the sputa a certain degree of fluidity. Nor in the stage of resolution can they be said to be of any special service."

While I have emphasised the probable microbic origin of pulmonary inflammation in childhood, it must not be overlooked that there are several necessarily concomitant etiological factors. The immediate exciting cause of a bronchitis is a "chill." This may be regarded as a definite vaso-motor disturbance by which the circulation in the respiratory mucous membrane is disturbed. If at the same time there are present in the body some vague and sundry debilitatory influences, the patient "catches a cold," the adaptive mechanism is thrown, as it were, out of gear. It is impossible to resist the inference that under such circumstances the bacteria normally present in the mouth and respiratory passages become endowed with an increasing virulence and seriously affect and influence the progress of the disease. A very close analogy to this may be found in the condition of the nutrition of the intestinal wall and the acquired virulence of the normal colon bacillus. By improving the physical condition of the lining membrane of the respiratory or intestinal tract, the bacterial invasion seems to be resisted. It has somewhat fancifully been suggested by M. Robin "that emetics play the same part in infective bronchitis that purgatives do in certain infective conditions of the peritoneum."

Treatment.—In considering the treatment of a mild acute catarrhal condition of the upper air passages in children, it is certainly possible in an early stage to limit the extension and reduce the intensity of the inflammation by such simple hygienic measures as (1) confinement to bed or to a room with a warm even temperature, (2) the administration of a suitable aperient, and (3) simplification of the diet. A diaphoretic may be given if a definite febrile condition exists. How rarely do we see a case in an early stage and how seldom is it possible to procure the first essential, confinement in a room with pure air and an even temperature? I will pass on, then, to the consideration of the treatment of severer cases of bronchitis, and of cases of broncho-pneumonia in infants and in older children.

The medicinal treatment, which is specially directed towards counteracting or influencing the inflammatory process in the lung, I shall consider first, not because it is the most important, but because it is the most abused agent in the management of these cases.

In an earlier part of this paper I indicated the inadvisability of the administration of stimulating expectorant mixtures in these cases of severe bronchitis. I suggested that in an early stage they were harmful, and that in a later stage of broncho-pneumonia they were useless. Emmett Holt, whose work in this as in other matters is admirable, goes so far as to say that expectorant drugs, whether relaxing or stimulating, may be advantageously dispensed with in the case of infants. He combats the hard dry cough by occasional inhalations and counter irritation. Though in my experience the value of warm medicated inhalation is considerable, yet in the majority of cases seen in practice the difficulties and disadvantages in the employment of steam are so great that it has to be abandoned. In laryngeal cases the greatest efforts should, however, be exerted to obtain steam inhalation, which as a rule may be used for about 15 minutes every two hours, the child of course being placed in a suitable tent during this period.

In hospital out-patient practice I see a very large number of moderately severe cases of bronchitis, and I am accustomed to order some mild relaxing expectorants to be given frequently in the late afternoon and in the evening if the cough is particularly "hard." I order the citrate or bi-carbonate of potash and small doses of ipecacuanha wine. I believe that some useful effect is produced by these drugs, just as I know that ipecacuanha wine is a valuable agent in the catarrhal affections of

the larynx in children. I make, however, this simple cough mixture quite subservient to the general hygienic treatment of the case, and I pay the greatest attention to the state of the gastro-intestinal tract; indeed the rhubarb and soda mixture of our children's hospital pharmacopœia has been many times lauded by the mothers of patients as a "wonderful cough mixture." In the later stage of a catarrhal bronchitis, even when only râles and no rhonchi can be heard on auscultation, I, personally, now never give to infants or young children a composite stimulating expectorant mixture. For several years past I have never ordered senega or squills in any prescriptions I have written for young children. Frequently in children under five years of age I order, in a late stage of a bad bronchitis, small doses of carbonate of ammonia or preferably the aromatic spirits of ammonia, simply and well diluted. I think I have seen, following this medication, some improvement which might not have taken place in the natural course. I never give, in broncho-pneumonia, carbonate of ammonia continuously or in the large doses, recommended even recently by such a physician as Pye-Smith, who advises one grain of the salt to be given as a dose to an infant a year old. Donkin employs this drug in nearly every case of broncho-pneumonia, though I am glad to say he writes "the so-called expectorants such as ipecacuanha, squills, or senega, I have often tried and long ago rejected."

Though I seldom order stimulating expectorants, I employ very largely in all severe cases of bronchitis and in every case of broncho-pneumonia respiratory and cardiac stimulants. Far and away the most valuable drug in these conditions is strychnine, and I associate with it the free administration of good brandy or whisky; in desperately bad cases I give in addition to these nitro-glycerine. It is very interesting to notice that strychnine has been only recently recognised as our most efficient respiratory stimulant, and that each year there is published further clinical confirmation of its value. About 10 years ago strychnine was not mentioned in many of the leading text-books on medicine, pulmonary diseases or pædiatrics. In Hilton Fagge's great work there is no mention of strychnine as a useful stimulant, while now, Pye-Smith in his most recent work on pneumonia writes:—"In addition to brandy and ammonia, and in cases where one or the other seems to fail, we may use strychnine as an efficient stimulus to the centres in the bulb. When a pneumonic patient is at the point of death, three or four drops of solution of

strychnine injected under the skin are more efficient than brandy, ammonia or ether administered in the same way." In their books on "Diseases of Children," published about 10 years ago neither Eustace Smith nor Goodhart mentioned strychnine as a suitable drug in the treatment of severe broncho-pneumonia, while the more recent writers, such as Rotch and Emmett Holt, call special attention to the value of this drug in such a condition, and the latter authority places it practically in the position of the only direct drug treatment advisable in the disease, for he does not mention carbonate of ammonia, and absolutely discards the other stimulating expectorants. "When the dose of strychnine requires to be repeated every three hours, $\frac{1}{100}$ gr. is as much as it is wise to give an infant a year old. This may be kept up for days, and for a shorter time larger doses may be given." I make a practice of giving from time to time a hypodermic injection of strychnine if the breathing seems to be getting shallow.

I want to make it clear, then, that while strychnine and carbonate of ammonia are both good respiratory and cardiac stimulants, strychnine is to be preferred in general, and especially in cases of broncho-pneumonia, to carbonate of ammonia, for this salt has the great disadvantage of acting as an "expectorant," of exerting as it were a selective action on the bronchial mucous membrane, and in this way it is very prone to irritate and engorge an already inflamed tract. It seems to me that a true principle in treatment is to recognise that cases of catarrhal pneumonia in young children require stimulation for the same reasons that indicate a similar line of treatment in typhoid fever, diphtheria or severe gastro-enteric affections, and that the same form of stimulation and stimulant drugs will be found useful in all these various conditions.

Brandy or whisky are required, I think, in many cases of severe simple bronchitis, and in every case of broncho-pneumonia. In my out-patient practice I order the brandy as a "cough mixture;" as much as one or even two ounces may be given daily to an infant a year old suffering with extensive broncho-pneumonia. I do not think I have ever seen good alcohol in this form exert anything like a narcotic effect in these particular cases in which there is undoubted consolidation of portions of the lung. In the various stages, however, of even a severe bronchitis, I have found, as might be expected, that a slight excess of alcoholic stimulation exerted much the same effect as carbonate of ammonia, and I have seen the

frequency of the respiration very much increased, with great distress and a rising temperature, in consequence of the temporary engorgement of the bronchial mucous membrane produced by unwise irritating stimulation. It is very important to recognise that at all periods of a bronchitis sudden engorgement and perhaps spasm of the bronchial mucous membrane may take place, and though not directly dangerous, may, I think, determine a fatal issue. Though I place the greatest reliance, then, on stimulating treatment, I always try to observe, concerning this therapeutic measure, the golden rule long ago laid down in the statement that "if the alcohol tends to bring the patient nearer to his normal condition it is doing good, if it takes him away from a healthy condition it is doing harm;" that is, whether the pulse, for instance, be abnormally slow or frequent if after a few consecutive doses of alcohol it approaches nearer the normal, then the stimulant may be regarded as doing its work satisfactorily.

I have never used atropine in these cases, although it has been recommended by very eminent authorities, and I think that it is well worthy of trial. Since I left Germany I have never seen camphor used, nor have I used it myself as the most effective stimulant in broncho-pneumonia. In Henoch's clinic in Berlin, all severe cases of the disease were treated with a combination of camphor and benzoic acid, $\frac{1}{2}$ gr. of powdered camphor and $\frac{3}{4}$ gr. of benzoic acid powder, made up with sugar and given every two hours. It is curious to realise that in parts of Germany, at least, *nux vomica* and strychnine are looked upon as of hardly any value. Lauder Brunton calls attention to this fact in his recent book.

In infants and young children it is I think unwise during any stage of bronchitis or inflammation of the lung to use opium in any form. In older children with acute bronchitis, however, valuable rest may be obtained by the use of Dover's powder given in small divided doses. In young children I have found antipyrin of value in diminishing the irritable cough and in inducing sleep. Two grains of antipyrin may be given in divided doses to a child under two years of age.

As I have already indicated, hygienic and dietetic treatment are at present the essentials in the management of acute pulmonary affections in young children. For the inflamed lung and bronchi, warmed fresh air is a remedy infinitely better than any drug, and suitable digestible food is more valuable than any stimulant. While in actual practice no effort

should be spared to impress these facts upon the parents and nurses, I shall not now dwell upon the manifold measures which are necessary to ensure the efficiency of this line of treatment. Though the rules of hygienic and dietetics are apparently simple and well known, their application is difficult, and in pulmonary diseases of childhood it can be truly said "that never are the common sense and tact of the intelligent practitioner more thoroughly taxed; no printed rule ever supplies or substitutes brains."

The use of artificially prepared oxygen would seem to be a measure of peculiar value, and so it may be, but it does not supply the place of food, and I have not found it to be of great benefit in actual practice among these cases of pneumonia. In broncho-pneumonia it is possible that the obstruction in the tubes prevents the ready access of the gas to the alveoli, but it is also well to remember that the dyspnoea of pneumonia can hardly be due to the diminished area of breathing space consequent upon the consolidation, but is due to the absorption of toxic products. From my experience I am of opinion that if oxygen is to be of any use in these cases it must be used very freely and comparatively early; though I have seen desperately bad cases improve for a few hours after the inhalation of highly oxygenated air, I have not seen any single case in which recovery followed its use. I now advise that an oxygen cylinder should be procured early and used as freely as it would seem warrantable to use such an expensive remedy. While oxygen, I know, has been of great benefit occasionally in the croupous pneumonia of young adults, it seems to me that it will prove in general to be of most value in cases of oedema of the lung and orthopnoea from a failing heart, consequent upon some acute affections, in older people. Such a case is quoted by Lauder Brunton, "in which cylinder after cylinder of oxygen was used and the gas inhaled for ten minutes at a time, as often as the nails got blue."

Emetics are of definite value in robust young children suffering from that so-called "second stage" of an acute bronchitis, when râles are to be heard abundantly over the chest. Once, however, consolidation has occurred emetics must be regarded as harmful. In special cases I frequently order an emetic dose of *ipecacuanha* wine to be given in the evening, and I am confident of the benefit which has followed its use. Immediately after the vomiting has ceased, I order stimulants internally and renewed counter-irritation externally.

Local applications which produce a marked cutaneous hyperæmia on the thoracic wall and

measures which are adopted to ensure, to a milder extent, the continuance of this condition and at the same time to prevent a definite chilling of the surface seem beyond all question to be of value in acute catarrhal bronchitis, and to a less extent of value in bronchopneumonia. In the out-patient department of the hospital, the common stimulating liniments are freely ordered, more, I used to think, for the satisfaction of the mother than for any appreciable benefit to the child. Recently, I have been convinced that any form of counter-irritation is of value in relieving at all stages the active hyperemia of the bronchial mucous membrane. Where the temperature is not high I allow myself to order a small linseed meal poultice to be applied over the front or back of the chest, and to be kept on for half-an-hour. The skin is then to be dried and a light dry cotton wool or wadding jacket is applied. In severe cases large areas over the sides and bases of the lungs may be counter-irritated by mustard paste (one part of mustard and six parts of flour, mixed with luke-warm water and spread between two layers of muslin), applied only for a few (five to ten) minutes. In severe cases this irritating application may be repeated every three hours; it should not blister but merely redden the skin. It may be alternated with the use of irritating liniments.

Large poultices or jacket-poultices I, and I believe most of my colleagues, never use. Their weight and their actual heat are overwhelming disadvantages in young children labouring with an acute pyrexial lung affection. Personally I dislike to order even a small poultice, except for the occasional relief of pain in a case of croupous pneumonia, but I find myself often compelled to give way to the opinions and prejudices of others. I then compromise by asking that the poultice should be small, applicable and manageable, and should be allowed to remain on the child for about half to one hour. It is of great interest to realise that the leading paediatrists throughout Germany never apply a linseed meal poultice to the chest. In Henoch's clinic, wet compresses were applied in a routine way to all cases of severe bronchitis and broncho-pneumonia. I will quote his statement on the subject in connection with the treatment of catarrhal pneumonia:—"I should much rather recommend you to have wet compresses applied to the chest from the beginning, reaching from the neck to about the umbilicus. A napkin or towel is to be dipped in water at the temperature of the room, wrung out and gently applied round the thorax without compressing it at all, and

so as to leave the arms free. Over this a sheet of wadding is placed, and the whole is covered with oil-silk or gutta-percha tissue. When the temperature is high, I have these compresses changed at least every half-hour, but afterwards let them remain 1 to 3 hours, and carry this on continuously for several days and nights. I have sometimes even continued this treatment for a whole week, and in these cases, generally, the water which was used cold at first was afterwards used at a temperature of 100° to 103° F. The compresses appear to have a favourable action in three ways: First, by the deep inspiration which takes place immediately on the application of the cold, drawing the air forcibly into the alveoli and possibly preventing atelectasis. Secondly, by the counter-irritation of the skin, which finally manifests itself in redness, papules and desquamation of the epidermis; thirdly, by the process of evaporation keeping the atmosphere round the child moist, and this may be aided by having steam coming from a kettle or spray apparatus close to the bed." It will be noticed that the use of these compresses is only slightly and indirectly antipyretic, but they effect the same counter-irritation as a poultice, without adding excessive extra heat to a febrile body. In connection with this matter, one of the assistants at the Charité asked me if in England it was true that heavy hot poultices were applied right round the chest, and, on being assured that such was the case, said it seemed just as reasonable to put a large poultice over the head in a case with symptoms of meningitis.

Antipyretic measures. In cases of bronchitis, catarrhal or croupous pneumonia, when the temperature is very high and when the child appears to be suffering from the hyperpyrexia, as evidenced by convulsive movements or actual convulsions, by extreme restlessness or delirium, I do not hesitate to apply a cold pack to the trunk or entire body. In these instances in which there has been at first considerable opposition to this course, the benefit has been so marked and so rapid that there has then on the part of the parents ready acquiescence to its continuance. As an antipyretic application, the wet cloths should not be covered with oil-silk or any impermeable material, but with an overlapping layer of flannel or old blanket. In cases of marked continuous hyperpyrexia with convulsions cold bathing is the most effective and rapid antipyretic measure, and should unhesitatingly be adopted. It is necessary to see that both during the application of the pack and the

bath the peripheral circulation is actively kept going by means of friction and stimulants.

From very definite personal experience I am confident that the exhibition of drugs like antipyrin and phenacetin in doses large enough to produce an antipyretic effect is not only harmful but dangerous. I have never seen any benefit following the use of quinine given in these cases, and I have most frequently seen it cause vomiting or some marked disturbance of digestion. I again would venture to impress upon you the great benefit to be derived from the resuscitating and antipyretic influences of cold applications in acute pulmonary and all other acute febrile affections of childhood. It is important, however, to employ this measure just for the relief of those serious symptoms associated with hyperpyrexia, and not simply for the reduction of the temperature. With the cessation of the serious symptoms, the application of cold should be suspended, to be, however, often reapplied, if necessary. It is easy in young children to cause marked depression by the too long application of cold.

So much then for the general therapeutic measures. I wish now to call your attention to the new era, which is promised to us, in the therapeutics of pneumonia. Each month, from various parts of the world, there are chronicled cases of severe pneumonia successfully treated by an anti-pneumococcic serum. Washbourn in England, de Renzi in Italy, and the Klemperers in Germany, are all workers in the field, and are reliable men of eminence from whom much may be expected. Washbourn himself contributed a short paper on the serum treatment of disease to the *Edinburgh Medical Journal* for May of this year, and he concludes his notes by writing that "it would be premature to say very much about the results of the treatment by the anti-pneumococcic serum. It has hitherto been impossible to apply a sufficient quantity of the serum to test it on a large scale. The cases," he writes, "which I have already published are sufficiently encouraging to make me hope for good results in the future." That future may be far away, and even with serum therapeutics cases of mixed infection present great difficulties, so that much remains, and will always remain, for us to do in the general treatment of serious cases of acute pulmonary disease. The general lines of that treatment I have attempted to indicate, and in the main my own experience has led me to agree with the most recent writings on this subject. About two years ago there appeared in the "Archives of Pædiatrics" six articles on the treatment of pneumonia in infants and

children, written by six of the leading pædiatrics in the United States, and part of the editorial summary of these papers may well be placed as the conclusion of these notes:—"In pneumonia the digestion is easily deranged and the appetite impaired. Any drug therefore, be it ever so efficacious in relieving cough or other symptom, if it disturbs the digestion or destroys the appetite, may result in more harm than good. It is true that certain medicines are of great value in combatting certain complications, but it is yet to be proved that any medicinal agent possesses a controlling influence on the disease *per se*. That many lives are saved by judicious management, however, is beyond doubt. Careful feeding and hygienic management, counter-irritation and inhalations, and judicious stimulation will save more children from death by pneumonia than can be saved by the filling of weak and irritable stomachs with irritating or nauseating drugs."

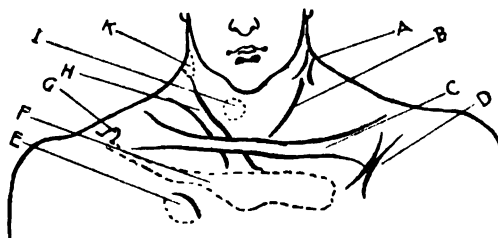
A PECULIAR CUTANEOUS DEFORMITY FOLLOWING EXTENSIVE SUPPURATION IN INFANCY.

BY EDWARD S. STOKES, M.B., CROOKWELL, N.S.W.

THE following case recently came under my notice, and as it presents a very peculiar condition I have considered it worth while making a brief note of it:—

G. S., aged 22, male, when three months old suffered from extensive and prolonged suppuration in the sub-cutaneous tissue of the front of the neck. As far as I can learn it was over three months until healing finally took place, but of course the patient could not give me an accurate description of the illness.

Upon examination I found this state of affairs:—



There were three distinct bridges of skin, C, D and H. There were various cicatricial areas, E, F, I and C, and also two half-formed bridges A and B. A small mammillary projection was seen at G.

To go more into detail, the bridges were composed of apparently normal skin. They were elastic and pliable, and covered with the same amount of fine hair that would be found normally in these parts. They were supplied with nerves, and sensation seemed as acute as in the surrounding skin.

The longest bridge, C, passed right across the neck horizontally, about $1\frac{1}{2}$ inches above the level of the clavicles. It was $5\frac{1}{2}$ inches long, and averaged about $\frac{1}{2}$ inch in diameter throughout its whole length, except at the extremities, where it broadened out at its attachments to the skin.

The second bridge, H, was shorter but broader than the first. It was situated on the right side of the neck, and occupied a position immediately over the sterno-mastoid muscle. It was $3\frac{1}{2}$ inches long and about $\frac{3}{4}$ inch wide in the centre. It was attached above at the level of the hyoid bone, and passed downwards and inwards beneath the bridge C, and became attached to the skin again over the sternal end of the right clavicle.

The third bridge, D, was the smallest of the three. It was $1\frac{1}{2}$ inches long and about $\frac{1}{2}$ inch wide, and situated in an oblique direction on the left side of the bridge C.

Of the cicatricial areas the largest by far was the one marked F. It extended from the outer end of the right clavicle to about 2 inches on the left side of the middle line. The diagram fairly represents its position and proportions. Projecting from its right extremity was a mamillary process, G, about $\frac{3}{4}$ inch long and $\frac{1}{4}$ inch in diameter.

Below F and on the right side of the chest was another scar, E. This was about the size of a sixpence, and the skin at its upper border was markedly curled inwards.

There were two smaller scars at I and K.

At A was a small incompletely-formed bridge differing from the others in that it was adherent on its under surface to the skin for its whole length.

B was a fold of skin about $2\frac{1}{2}$ inches in length, situated over the inner border of the sterno-mastoid muscle, and running in the same direction. It occupied an exactly similar position on the left side as the inner edge of bridge H did on the right. In fact the symmetrical arrangements of this fold and the bridge H strikes one very much when seeing the patient.

I regret that I did not note the condition of the platysma muscle, but I may have an opportunity later on.

THE COLD PACK AND BATH IN THE TREATMENT OF TYPHOID FEVER.

By C. JOYCE, M.B., B.S., BEACONSFIELD, TASMANIA.

A SERIES of 128 cases during the seasons 1895 to 1898, 125 recoveries, one death due to general tuberculosis during convalescence from fever, one to heart failure in a powerful athlete, one to asthenia.

Methods of Use.—As a matter of routine where feasible, the patient is put in a bath at about 85° F., remaining in 10 to 15 minutes, the water being gradually cooled to a degree varying with the character of the case. More frequently the pack has been used. The patient is stripped and wrapped in a wet sheet without any other covering, cold water cloths being applied to the head. After an hour the patient is rubbed dry and covered with the bedclothes. This may be repeated as often as thought advisable. When the skin is very dry the sheet may be covered with a blanket, or blanket and mackintosh, to induce perspiration. When the patient is convalescing sponging is substituted for the pack.

Effects.—Temperature is lowered; the tedium and tiresomeness of the disease are lessened; headache, restlessness, insomnia are relieved; delirium is abolished in all but a few rare cases; the status typhosus does not appear; a dry tongue is a rarity; the severe complications of the disease are rarely seen; wasting is diminished; a strengthening and diminution in rate of the pulse; increased elimination per kidneys of waste products; a general amelioration of the patient's condition and "toning" of the system; respirations increased in volume and frequency; low rate of mortality, much lower than obtains under other methods of treatment in the same district.

Complications.—Hyperpyrexia: 6 cases, one reached $108^{\circ}.8$, one $106^{\circ}.4$, four 106° F.; nineteen 105° or over. Two among these were fatal, but the temperature did not reach 106° . Mental aberration of short duration occurred in one boy, lasting a fortnight after the febrile stage. Heart irregularity present in several; Bradycardia in two. Quick feeble pulse lasted for some weeks after febrile stage in three. Lung complications rare; cough from laryngeal mucus frequent. Pneumonia (Lobar) 1, (Broncho) 2; bronchitis, several. Two had previously existing phthisis; one died. Deafness has been frequent, without earache; one ear suppurated. Constipation has existed in more than half the cases; diarrhoea very troublesome in many. Hæmorrhage severe in

four cases, but none fatal; slight in several. Hiccough lasted several days in one case after hæmorrhage, and in one uncomplicated case. Vomiting occurred in many; was very troublesome in a few. Tympanites frequent; terebene acted well. Anorexia extreme in three cases. Urine: Retention in about 12 cases; scalding and frequent micturition in many others. Bedsores occurred in several non-hospital cases; boils in several. Purpura, 2; urticaria, 3; miliaria in many; psammoma in many; subcutaneous abscesses in several; phlegmasia in 3, with subsequent diffuse sup-puration in 1.

These results have been gathered from 128 cases, of all ages and conditions; highest age 61, lowest $1\frac{1}{2}$ years. The majority were of moderate severity, many were very mild, but many very severe in type. Many of these had been ill for some time before coming under treatment as much as five weeks, and I have had the pleasure of seeing in a few days the temperature reduced from 104° or 105° to two or three degrees lower, and kept there. The delirium also has disappeared, and peaceful sleep takes the place of wakeful wanderings. In these cases I have so frequently seen an improvement take place in a day or two that is simply marvellous. This treatment has won my unbounded confidence and admiration. Of the various treatments which I had given a trial previously none can compare with it.

CASE OF PURPURA HÆMORRHAGICA.

By GEO. H. SKINNER, L.R.C.P. LOND.,
M.R.C.S. ENG., MILAWA, WANGARATTA,
VIC.

AUGUST 18th, 1898.—J. M., *æt.* 19, a strong muscular youth, a farmer's son, complained to his mother, on rising at 6 a.m., of feeling "out of sorts" and disinclination for his usual work. His throat was sore, and later in the day commenced to spit blood. Medical advice was sought same evening on this account. I found patient suffering much discomfort from "a swelling in the throat," also from a difficulty in swallowing. He was also spitting blood-stained mucus. No laryngeal symptoms. No cough. Temp. 103° . Examination of lungs and other organs negative. Throat: Not much external swelling, but internally noticed much active congestion, very offensive odour, and discharge of sanious fluid. Owing to examination by "bad lamplight," could not satisfactorily explore, and decided to further examine following morning. As no signs of diphtheria or scarlet

fever were apparent, supposed it a case of "quinsy."

August 19th.—Visited patient at 10 a.m. (Messenger had reported no improvement). Found on examination, after spraying with cocaine solution, a well-defined black spot on posterior wall of pharynx, about size of a shilling. The centre was jet black, surrounded by a ring of intensely inflamed mucous membrane. The submucosa was much thickened. A very offensive sanious discharge was exuding, also fresh blood at every movement. The odour and appearance of the parts was characteristic of "gangrenous ulceration." The tonsils were not affected, no glands enlarged. Having scraped away all the sloughing tissue, I applied strong acid carbolie; and, as bleeding continued, some glyc. acid tannic, which checked it for a time. As the bowels had not been moved for three days, gave *haust. nigr.* ζ iss., and directed when bowels had acted plenty of strong nourishment and port wine to be given. Locally, to relieve pain, hot bran poultices and steam inhalations. Astringent wash for throat of chlorate of potash. The excreta were of a very black colour from ingested blood (3 p.m.). Temp 102° ; pulse 120, quick, feeble.

August 20th, visit 10 a.m.—Evidently much worse; sallow, anxious appearance. Throat exhibits foul ulcerating wound, size about a florin, with fetid discharge and much blood clot. Persistent vomiting set in (probably due to blood and putrid discharge swallowed). On this account there was difficulty in retaining medicine or nourishment. Patient became very restless; refused everything except lemon-juice drinks. Noticed this morning for first time a well-marked "purpuric" rash, chiefly about legs and feet, less on body and arms, petechiæ of all sizes from pin-point to that of a small tabloid; colour purple, not raised, no disappearance, and a symmetrical distribution about the legs. Owing to the grave condition of the patient, decided to have a consultation, and same evening Dr. McCordel, of Wangaratta, saw the case and examined throat. The boy was at this time much worse than when I saw him in the morning, and as his condition was obviously hopeless we deemed it inadvisable to interfere actively. We tried several large doses of liquid ergot (P. D. and Co) to arrest hæmorrhage, and gave instructions to prevent patient rising or moving, as epistaxis was also troublesome. We could give no hope of recovery to friends. During the night the patient jumped from the bed, and escaped from the room for some minutes. Bleeding increased, vomiting and other symptoms

continued, and when I saw the case next morning (August 21st) he was in a semi-comatose condition, blood and putrefactive fluids issuing continuously from mouth and nostrils at every movement. Death ensued during a slight convulsion.

Remarks.—The diagnosis pointed at first to a case of "gangrenous or sloughing sore throat," but owing to the grave constitutional symptoms, alarming hæmorrhage and peculiar rash, the true nature of the disease became evident as "purpura hæmorrhagica." A bad prognosis was given from the first. I have nothing, I am sorry to say, to recommend in the way of treatment. The remedial measures I did take were very difficult in their application, as the family resided about eight miles away in the bush, and not one of them had even a rudimentary idea of cleanliness, much less of nursing; so that no details were attended to, and the patient was allowed to please himself entirely with regard to medicine, local applications and nourishment.

The case appears interesting on account of its rapid and malignant course, and shows that a young and vigorous man (footballer) may be attacked and succumb within a few days from this comparatively rare disease. There was not much physical weakness, and I consider the immediate cause of death "hæmorrhage from the throat." This ulcerated and gangrenous condition of the throat might have been caused by a large sub-mucous hæmorrhage (purpuric), the blood-clot becoming septic producing intense cedema and inflammation in the pharyngeal tissues, occlusion of the vessels, and slough. A condition similar to spreading gangrene.

The various movements of the muscles of the pharynx in spitting or swallowing causing almost continuous hæmorrhage from the vessels, hence the futility of styptic applications or internal remedies.

I have once only encountered a somewhat similar case (some six years ago) in a girl about 10 years of age, but the disease did not prove fatal. She had the same rash about legs and body, and a large hæmorrhage in region of Scarpa's triangle, and which eventually formed an abscess, and gave rise to hip-joint trouble. She was under the surgical treatment of Mr. Wood, at Children's Hospital, Melbourne, and left with useful limb, and is now in excellent health.

Messrs. F. Stearns & Co., of Detroit, announce in our advertising columns (XIII. and XXV.), several of their specialities. Many of these, such as "Kasagra," "Wine of Cod Liver Oil," and "Kola-Stearns" are so well known on this market as to need no comment.

ON SOME UNUSUAL COMPLICATIONS AFTER LAPAROTOMY.

By J. E. WOLFHAGEN, M.B., CH.M. EDIN.,
HOBART, TAS.

A. M., *æt.* 33, commercial traveller, was operated on for a hydatid in the abdominal cavity on December 1st, 1897. The incision was made at the outer border of the rectus on the right side, in the iliac region, the cyst stitched to the abdominal walls, and thousands of daughter cysts were evacuated. The hydatid was an unusually large one, extending upwards towards the liver, and thence across to the stomach, also extending across the lower part of the abdomen from right to left, and well down into the pelvis on the left side.

Patient suffered only slightly from chloroform sickness, passed flatus next day. Early on the morning of the third day he began to hiccough violently, and continued to do so all day. The bowels had acted; there was no distension. In the evening he vomited about $\frac{1}{4}$ pint of distinct coffee-ground material, and again during the night vomited twice the same material, only in larger quantity. Counter irritation over the stomach, ice, cocaine solution, and opiates by mouth had no effect.

Early on the fourth day he got a hypodermic injection of $\frac{1}{2}$ gr. Morphia, which produced two hours sleep, but on awaking the hiccough returned, and he again vomited coffee-ground material.

Gave him a saline aperient, which acted freely during the day, and in the evening repeated hypodermic of $\frac{1}{2}$ gr. Morphia, which gave him several hours sleep during the night, but when awake the hiccough continued.

On the fifth day there was no vomiting; the hiccough continued, although with intermissions. He complained of hunger, and was given some bread and milk. After this first attempt at solid food there was a distinct improvement in the hiccough. He got some natural sleep during the night; next day took some bread and butter and poached egg. There was no return of the vomiting, and he made an uninterrupted recovery.

The only explanation which I can offer for the attack is that, by the sudden removal of pressure from the abdominal cavity, the phrenic nerve must have become irritated, and set up the condition of hiccough. The bleeding from the stomach is also difficult to account for, but to my mind may be due to the sudden relaxation of the wall of the stomach owing to removal of pressure, and the consequent tearing of the mucosa.

Miss N., *æt.* 48, very stout. Had rheumatic fever twice. Three years ago a severe attack of typhoid; twelve months ago repeated attacks of gall stones, during which time some very large ones were passed.

She was operated on, May 12th, 1898, for a large thick-walled ovarian tumour. Beyond a very thick adhesion to the fundus of the uterus there was no difficulty in removing the tumour; the left ovary and tube were removed at the same time, as they were firmly adherent to the tumour.

For five days the patient went on comfortably. Passed flatus on third day. Bowels were relieved by enema on fourth and fifth days. Temperature for the first six days did not rise above 99.2°. Pulse ranged between 98 and 100.

As there was some flatulence, the nurse gave patient oz. packet Epsom Salts on the morning of the sixth day. This produced very free evacuation. The evening temperature was 99°. It remained at that next morning, and the next evening reached 100°. An acute attack of diarrhoea had commenced, and continued for the next twelve days, the evacuations frequently containing a considerable amount of blood. The temperature kept up between 100 and 101°, a rapid, weak pulse, no distension, and comparatively little pain. The wound looked perfectly healthy, and healed practically by first intention. By the end of the third week the diarrhoea gradually subsided, the temperature fell to normal, and pulse rate gradually slackened.

She has now made a perfectly good recovery, and has gone home.

This case has raised in my mind some doubts as to the early administration of purgatives in abdominal sections. I believe it is now a routine practice to administer Epsom Salts at the time of or immediately after the operation. Keith's rule, of waiting until the seventh day, seems to have much to recommend it, unless any paresis of the bowel exists. It is possible that in this instance an acute enteritis was set up by the administration of Epsom Salts.

DECAPITATION BY A PRIMITIVE METHOD.

By THOMAS WYLD FAIRMAN, L.R.C.P.,
L.R.C.S. EDIN., CHRISTCHURCH, N.Z.

I was recently called to a 3-para, who had been in labour about 24 hours, and during that period had been sustained by the consoling ministrations of a midwife. I found the pelvis tightly packed by the body and head of the

fœtus, whose left arm as high as the shoulder protruded from the vagina. Contractions were strong and continuous, and, though version was apparently out of the question, it was attempted as a matter of routine. Chloroform was then administered, the stylet withdrawn from a gum-elastic catheter, and to the latter a yard of stout tow-line, used in deep-sea fishing, fastened by its middle above the bone guard. I introduced the catheter with the right hand, and with the left fore-finger managed to guide it over the neck. It was now felt by the fore-finger of the right hand, introduced on the opposite side and below, and hooked down. By a little manipulation the catheter was withdrawn, and thus a double line embraced the neck of the fœtus. I then drew it through a Ferguson's speculum, which was pushed up as far as possible to protect the maternal structures, and given to an assistant to hold. One end of this double line was then taken in either hand, and, after sawing away for a very few minutes, I was gratified to find decapitation easily effected. A final pain brought the body and then the head into the world.

By this means a serious cutting operation is avoided. The method is simple and expeditious—a window-blind cord is always at hand—the vertebra is sawn in a clean and uniform manner, leaving no spicules of bone to injure the mother, and the effect as regards shock is nil. I would suggest that the line be long, so that we may vary the cutting area. This would prevent the line wearing through, in which case reintroduction might be difficult, and the direction of incision in the child's neck might be altered.

The idea of using a cord was suggested to me by a short paper in the *Edin. Obstet. Trans.*, 1889-90.

PROCEEDINGS OF BRANCHES.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting, held at the University on Thursday, August 25th.

Present: The President (Dr. Swift), Drs. Stewart, J. A. G. Hamilton, Giles, Marten, London, A. E. Wigg, Poulton, Symons, Henderson, Souter, H. M. Evans, Michie, Russell, H. H. Wigg, Cavenagh-Mainwaring, G. C. Hayward, Morgan, J. C. Verco, Niesche, Shepherd, Hill, Bickle, A. A. Hamilton, T. K. Hamilton, Cleland, Corbin, Gunson, S. J. Magarey, Fischer, W. A. Verco, Gault, Jay, and Hon. Sec. (Dr. W. T. Hayward).

EXHIBITS.

Dr. POULTON showed a man, aged 69, who had developed empyema of the left side soon after, and apparently in consequence of, a kick from a horse. There

was no evidence of rib fracture. The chest had been incised and drained.

Dr. T. K. HAMILTON exhibited the specimens of a case in which latent mastoid disease had resulted in purulent meningitis and death. The paper recording the case was held over to the next meeting.

CORRESPONDENCE.

From the Secretary of the Pharmaceutical Society, suggesting that the New Pharmacopœia should come into force in the colony on January 1st, 1899. The Secretary reported that he had written that the Council approved the suggestion.

BALLOT.

Drs. J. E. Good and F. J. Douglas, having been elected members of the British Medical Association, were elected members of the South Australian Branch. The meeting then resolved itself into a special meeting to consider an ethical point.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting of the Victorian Branch was held in the rooms on Wednesday, August 31st, at 8 p.m. Present: The Vice-president (Dr. Kenny) in the chair, and Drs. Kent-Hughes, Springthorpe, Strong, C. D. J. Wood, Nihill, Stawell, Gertrude Halley, Janet Greig, Helen Sexton, Lillian Alexander, Cuscaden, Loughnan, Bennie, Scott, Naylor, J. R. M. Thomson, and A. G. Black.

An apology was received from the President regretting his inability to be present.

EXHIBITS.

Dr. KENT-HUGHES exhibited for Dr. Harricks, who was unavoidably absent, an interesting case of burn of hand presenting special features.

Dr. SPRINGTHORPE exhibited—

- (1) A case of aneurism of the arch of the aorta at the junction of the transverse and descending portions.
- (2) A case of double aortic disease with dilatation of the aorta, with sphygmographic tracings of the pulses showing the differences according as the diastolic bruit was audible some feet away from the patient (four years ago), and at present, when the bruit was audible only on auscultation.
- (3) A case of mitral stenosis, in which an attack of incomplete hemiplegia had been apparently due to specific disease of one of the cortical branches of the middle cerebral artery, and not to embolism.
- (4) A doubtful case of progressive muscular atrophy of the scapulo-femoral type.
- (5) Illustrations of handwriting from a case of general paralysis, both previous and subsequent to the development of his ideomotor paresis.

Dr. STAWELL then read his paper on "The Pathology and Treatment of Broncho-pneumonia." (See p. 388).

The CHAIRMAN regretted that the inclemency of the weather had prevented the attendance of many who had been expected to discuss this most important question.

Dr. SPRINGTHORPE remarked that his own standpoint, that of a general hospital, might perhaps be taken as supplementing Dr. Stawell's. For purposes of clearness he would eliminate cases of capillary bronchitis, which was rare with him, of œdema of the lung, and of true pneumonia, though he was aware that broncho-pneumonia

in children frequently represented pneumonia in adults. In adults, however, pneumonia was so characteristic that it could not be included under the same heading. He sent round thirty charts, which showed exceedingly well the characteristic ratio of pulse, respiration, and temperature, the termination by crisis, the subsequent uninterrupted convalescence—as well as three cases that had been fatal during the first week. The only diagnostic difficulty was in cases of double pneumonia, and such could be differentiated with care and experience. Turning to true broncho-pneumonia, his cases could be classified as follows: (a) Probably the most frequent were those connected with tubercular disease, either as ushering in a phthisis pulmonum, generally of an acute or sub-acute type, or as representing a rapid and wide extension of tubercle already present; (b) certainly next in frequency came cases of influenzal origin, in which the cause was either the influenzal bacillus, or some form of coccus, and characterised by slowness of resolution and tendency to tubercular infection; (c) cases in people beyond middle age, following indefinite catarrhs, bronchial asthma, etc., and apparently due to staphylo- and strepto-cocci; (d) cases secondary to typhoid fever, diphtheria, and measles,—a certain proportion varying with the prevalence and severity of the epidemic, and also the result of catarrhs and coccic infection; and lastly, cases of so-called "blood-poisoning," in which the cause was often more obscure, but associated with infection of blood or lymphatics by a variety of germs, several specially interesting examples of which he had reported from time to time. Thus his classes of cases were different to those of Dr. Stawell's. Hence in some ways the treatment adopted showed some differences, though he was glad to find a general agreement on all essentials. Thus: (1) So many cases being secondary, he would lay special stress upon attention to the respiratory tract after bronchial troubles, and the avoidance of exposure during convalescence. It was astonishing how often a naso-pharyngeal catarrh, or even bronchiol catarrh, was left without satisfactory renovation and treated with general, and not with local and general, measures. Coming to the cases of broncho-pneumonia themselves, the temperature of the room might perhaps be 60° to 65°, instead of 70°, with our adults, and there did not seem the same necessity for the almost entire inhalation of warm, moist air that there was in children, though occasional inhalations, sedatives, stimulant and antiseptic, had very great value. So, too, with the local applications, the somewhat despised poultice he still advocated to relieve pain and reduce engorgement. Later on, the "pneumonic jacket" or fomentations were still very serviceable, and he had found little need for local cold; but the preference depended upon the patient and the case. The cold compresses of Henoch and others were really warm fomentations, after the first few minutes. Of course, the use of cold cloths, baths, etc., for antipyretic purposes was an entirely different matter. There could be no two opinions that hydrotherapy was the best antipyretic. But the local measures by no means ended there. There was undoubted value in counter-irritation right on till the time of recovery, graduated of course according to the need. He generally selected from lin. camph. co., lin. terebenth., or lin. iod. Throughout, also, continued attention was paid to the *prima vie*. Almost as a routine, a mercurial purge was given, followed when and where necessary by a saline, the bowels being moved every day, and the state of tongue and urine noted and attended to. Food and nursing were, of course, the two sheet anchors, and dealt with

on the recognized lines. The treatment of the local condition by drugs was quite secondary, and, in his opinion, Dr. Stawell had struck a proper and necessary note in dealing with this part of treatment. Still, the fact that the type with him was less bronchial than with us justified certain differences. Personally, he practically never used either ipecac. or senega during the pyresical stage, and agreed that the spt. seneg et ammon. of the Hospital Pharmacopœia was often seriously misused. He scarcely ever prescribed it. Squills, however, he still resorted to in the later bronchial stage. Ammonia and ether he classed together as stimulants, the former with a special effect on mucous membranes, and resorted to their exhibition as often the local and general conditions seemed to warrant them. Strychnine undoubtedly was the stimulant par excellence, and probably the most useful single drug in this class of cases; and though the present custom was to give it insufficiently, still it should be remembered that extensive use caused exhaustion, and it was only a ready means of getting the medulla, etc., to put forth its powers. It added none of its own. Still more was this the case with alcoholic stimulants. Besides the danger of the narcotism that might supervene, alcohol and its allies acted simply like a spur; judiciously used it brings the horse in a winner, used at the wrong time or in excess it promotes an earlier collapse. In his mind, it was often the most difficult thing in treatment to know how to manage the stimulant. There was no royal road; continued watching and a wide experience were necessary. As regards oxygen, he agreed entirely with Dr. Stawell. As regards opium, he frequently gave small doses of pulv. Doveri at the outset, and small doses of morphia or codeine to check the cough during the subsequent stages. Antipyrin he used only at the outset, and generally in influenzal cases. Emetics were, of course, not required in adults. Expectorants, such as apomorphia, ammon. chlorid, etc., were sufficient. As regards the serum treatment, in none of his cases had the antistreptococcic serum seemed the correct anti-toxin; of the serum he had no personal experience.

Dr. WOOD briefly expressed his general agreement with Dr. Stawell's conclusions. A temperature about 70°, creasote and similar inhalations frequently, good nursing, and scientific diet, were of more importance than medicines. A change of room often did good, and the crisis not uncommonly needed strychnine and alcohol.

Dr. NIBBELL supported the views advanced. Seven years' experience in an out-patient department had led him to rely more upon mercurial salines, alkalies, and pot. iod. than upon such combinations as the spt. seneg. et ammon. Small doses of mercury often gave good results.

Dr. BLACK, as a general practitioner, gave a note of warning that, in prescribing brandy, the publican should always be informed that it was for a sick person, who required it little and good, otherwise the stuff supplied would probably upset the patient.

In reply, Dr. STAWELL thanked members for their courteous hearing. He was glad to find how thoroughly he and Dr. Springthorpe agreed under their somewhat different conditions. The matter was so important, and so many erroneous practices were still common, that he trusted that members would forgive him if he had treated the question at some length.

The meeting then adjourned.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Branch was held on Friday, 26th August, 1898. Present:—Drs. W. Chisholm (President, in the chair), Rennie, Fiaschi, Crago, Clubbe, Thring, Macdonald Gill, Hankins, Sawkins, Marshall, Morgan Martin, West, F. H. Quaife, Coutie, Goode, Traill, Gillies, Marano, Wilkinson, Parker, F. W. Hall, Binney, Magnus, Gledden, Neill. Several fifth-year students were also present. The minutes of the previous meeting were read and confirmed. The President announced the election of the following gentlemen as members of the Branch:—Drs. J. F. Freyer, H. Guy Warren, R. M. Farrell, and A. Pring. An apology for Dr. McAllister's absence was received.

Dr. JAMIESON read a paper on "Widal's Serum Reaction—its value as a test for Typhoid Fever" (see page 381), also exhibited a number of cultures.

Dr. QUAIFFE said that a difficulty had occurred to him in the cases of those who had had typhoid fever within the time limit stated, as the reaction would occur whether the fever were present at the time of examination or not. He (Dr. Quaife) would like to hear Dr. Jamieson's views on this point.

Dr. GOODE said that the tests by the urine were very instructive and interesting, he could certainly congratulate Dr. Jamieson on these results.

Dr. WILKINSON said it was very gratifying to know that bacteriology had forced itself upon the clinicians, a change had certainly come over the whole question. The tests in the test tubes were as positive as those under the microscope. The tests should be made by experts in the laboratory. The ammoniacal urine test was very interesting. He must congratulate Dr. Jamieson upon the success he had obtained in the tests.

Dr. JAMIESON replied.

Dr. WILKINSON moved:—“(a) That it is the duty of the Branch to organize a deputation, including medical members of the legislature, the president of the Board of Health and representatives from the chief city hospitals, to wait upon the Premier and urge upon him the immediate necessity for devising some practical scheme for preventing the spread of tuberculosis.

(b) That such a deputation should advise the erection of a hospital for the admission of advanced cases of consumption as a matter of the first importance and of great urgency.” He thought the importance and necessity of taking some measures for the prevention of the spread of tuberculosis was nowadays so universally recognised in the profession that few words would be required to commend this resolution to the meeting. He was one of those who held that the medical profession had higher aspirations than the mere object of earning a livelihood by their knowledge, and, in the cause of suffering humanity, lay under a moral obligation to proclaim and prosecute a crusade against this all-too-common disease, tuberculosis. His action was actuated by no spirit of antagonism to the Board of Health, but rather aimed at strengthening the hands of the Board in its efforts to stem the tide of this infectious and therefore more or less preventable disease. The deputation would at least serve the purpose of educating the people on this matter. No doubt the profession recognised the urgency of the question, but until the community was thoroughly seized of the real nature and serious prevalence of tuberculosis, they could not expect those great engines of reform and enlightenment—the Parliament and the press—to join the crusade and do a great public service. At the present time they found in the Statistical Register that tuberculosis was classed as a constitutional

disease. It would be of vast benefit to the community if tuberculosis of the lungs were proclaimed to be an infectious disease, and as such classed with the notifiable diseases. At present diphtheria, typhoid fever, scarlet fever, small-pox, and leprosy, these and no others, were notifiable diseases by the action of the Executive Council. Surely, tuberculosis of the lungs should be included in this class. Tuberculosis, which had its origin mainly in tuberculosis of the lungs, causes every year five times as many deaths as typhoid fever, eight to ten times as many deaths as diphtheria, thirty times as many deaths as scarlet fever, 100 times as many deaths as measles, and 1,000 times as many deaths as small-pox or leprosy; and even many more deaths than all of these diseases put together. Tuberculosis was vastly more infectious than leprosy. Accordingly, any argument in favour of making diphtheria, typhoid fever, and the other diseases notifiable applied with tenfold force to tuberculosis of the lungs. Apart from general methods of prevention which have been discussed elsewhere, one of the first steps should be the erection by the Government of a suitable hospital containing 50 or 100 beds in or preferably near Sydney for more or less advanced cases. When once the people recognised that better treatment, more suitable food, better nursing, and far healthier surroundings were to be obtained in such an institution, there would be little difficulty in persuading the sufferers to seek such a place of refuge. Such an institution would thus bring about an incidental isolation of the disease in its most infectious stages, and thus be the means of preventing the spread of the disease in the family—from parent to child, or from brother to sister. The homes of the poor were the breeding grounds of consumption, and it is everywhere recognised that a hospital of such a character, and for such a purpose, is an essential part of any system of rational prophylaxis. The deputation should be strong so that the Premier might be induced to recognise the necessity of establishing such a hospital without further delay. Under existing circumstances advanced cases of consumption were not provided for, seeing that they were considered unsuitable for the wards of a general hospital. These cases were literally allowed to extend and multiply their ravages in the community without let or hindrance. The remarkable results obtained in London, New York, Philadelphia, and large centres of population in other countries proved beyond doubt the value of preventive measures, and among these none held a higher place than the erection of special hospitals for cases of advanced consumption. It was high time that action on similar lines should be taken in Sydney. He begged to move the resolution standing in his name.

Dr. SAWKINS, in seconding the resolutions, said there was very little doubt as to the danger arising from consumption; and any means of prevention should be hailed by the public with satisfaction. The hospice for incurables was a very necessary establishment, and every effort should be made to bring about the consummation of such a desirable object. Some two and a-half years ago a committee was appointed to deal with this question and to urge the building of such a place near Sydney, but so far nothing has been done. The Victoria Consumptives' Home fund has not at present the necessary means for building and maintaining such an institution; therefore the Government should be approached.

Dr. THRING said that as a profession they had a duty to the public and that duty was clearly to make suggestions for the prevention of the spread of disease. He would like to know who was to organise this deputation, as what was anybody's work was generally

nobody's. He (Dr. Thring) was quite in accord with the mover of these resolutions, and thought that some definite steps should be taken to bring about so admirable an object.

Dr. W. CHISHOLM thought that all must agree with what Dr. Wilkinson had stated; in fact he could not see how the statement could well be traversed. At the same time seeing that the Government was rather unsettled, and although agreeing with Dr. Thring that there was a great tendency to put off doing what ought to be done, he (Dr. Chisholm) thought the present time inopportune for bringing this question under the notice of the Government. Seeing, moreover, that it was proposed during the coming week to take steps towards bringing under the notice of the Government the urgent necessity for a medical bill, and other matters of interest to the profession, he confessed to a feeling that it would be wiser to formulate the proposals and consider them well before doing anything in the subject. He thought it not unlikely that a request for money for the proposed hospital would be met by a reference to the Hon. Treasurer of the fund already collected on behalf of the Queen Victoria Homes for Consumptives.

Dr. CRAGO said there was a hospice for the dying in connection with St. Vincent's Hospital. Dr. Crago also drew attention to an article in the *British Medical Journal* dealing with the open air treatment for cases of consumption.

Dr. JAMIESON said that he agreed with the idea of consumption being made notifiable, and that the Board of Health had the power to add any infectious disease to the list of notifiable diseases.

Dr. QUARF said the business of the deputation would be to press upon the Government the need of immediate action in this matter.

Dr. GOODR said he agreed with what had been said, but was not so sure that the building of a hospital for advanced cases would entirely meet the case. Dr. Wilkinson had said something about the decrease in the disease in London during the past 40 years, but it must be remembered that London had been opened up and been better ventilated, and these matters were large factors in the reduction of the mortality in such diseases. The Board of Health had the power to make the disease notifiable, but what good would result; the only effect would be that the room in which the patient had been kept would be disinfected. He did not think the time opportune for moving in this matter and would advise a postponement.

Dr. NEILL said that if the time for dealing with this question was not opportune now it never would be. The scheme for a hospital for the treatment of advanced cases of consumption was to be followed by one for dealing with cases in the earlier stages. He thought consumption should be one of the notifiable diseases under the Health Act. Houses should be thoroughly disinfected when patients were removed. He would give his cordial support to the scheme formulated by the resolutions.

Dr. CLUBBE said he quite agreed that a hospital for advanced cases should be erected, but would the hospital be under the control of the Government. All knew that hospitals under the control of the Government were not so well managed as the public hospitals. He (Dr. Clubbe) thought that pulmonary tuberculosis should be made notifiable; there could be no question that many cases of children suffering from hip disease and such like trouble could be traced to infected homes. Another matter which required attention was the supervision of the milk supply.

In reply, Dr. WILKINSON thought the Association was generally favourable to the scheme; he believed

this matter to be of greater importance than the Medical Act they were promised. Dr. Clubbe had raised an important question, but the proposal did not touch upon management or control. Their object was to urge the Government to build a hospital for consumption in the interests of the sufferers as well as the interests of the community. He feared it would be useless to attempt to get the public to subscribe the necessary funds. Considering that this disease caused more deaths than all other diseases put together, it was essential that some definite and concerted action should be taken, and now was the time to act; he did not believe in a postponement of the project. Far from agreeing with Dr. Goode, he maintained that if the disease were notifiable, the mere fact of such being the case would be the means of educating the people as to its infectious nature, and then one great step would have been made.

The PRESIDENT thereupon put the resolution to the meeting, and it was carried unanimously.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

A MEETING of the above Branch was held in their rooms, Edward-street, on August 5th, 1898.

Present: Dr. Connolly (President), Drs. Taylor, Brockway, Comyn, Marks, Orr, Halford, Francis, Carvosso, and Jackson; visitor, Dr. Cameron.

Dr. JACKSON exhibited a case of abdominal tumour in which he had operated. Abandoned the operation as "inoperable," and in which the tumour, which had been called malignant, had since disappeared.

Dr. TAYLOR read a paper on "Chloroform Syncope." (See page 384.)

Dr. MARKS said that Dr. Taylor seemed to have had more experience of syncope in the administration of chloroform than he had had. He remembered only one case in which he had any bother of the kind. That was in a tracheotomy. It should be remembered that the vapour of chloroform was heavier than air, and that when the inhaler was held directly over the mouth the vapour had a tendency to pour into the mouth. For that reason he (Dr. Marks) held the inhaler to one side, or allowed the lower end to rest on the chin only. He used a flannel inhaler on wire frame. It should of course be remembered to keep the stock of chloroform from the light.

Dr. FRANCIS asked if there was any way of distinguishing the two kinds of chloroform syncope mentioned in Dr. Taylor's paper.

Dr. CARVOSSE had had difficulty in one case,—a spare, delicate man, 84 years of age, who had been well prepared for the administration. He had an early breakfast, and had chloroform at 11 in the morning for the removal of teeth in the horizontal position. He took it well enough at first. The inhaler was held off the face at first. There was no excitement or struggling. It took only 1 drachm to put him off. One tooth had been extracted, when suddenly the breathing stopped. It took some minutes' artificial respiration to restore him to normal breathing again, and the removal of a few more teeth seemed to help him to revive. He saw one fatal case in the Edinburgh Infirmary—a case of empyema, which had been turned on the sound side during the operation. Ether was rarely given in the Edinburgh Infirmary; at least, up to the last three years.

Dr. BROCKWAY used a wire and flannel inhaler having a button-hole in the top, and gave the drug as slowly as possible, and at regular intervals. In this

way he found a much smaller quantity sufficed. He watched the pupil all the time, and diminished the supply of the drug when the pupil contracted. Previous to a final and dangerous dilatation there was a stage when the pupil was contracted, and at that point he stopped the drug. He had only one case of difficulty: He was operating in the country, and had anaesthetised the patient himself. The trouble was due to the falling back of the tongue, and was easily put right.

Dr. COMYN related his experience in the case of a woman with eclampsia, whom he had kept more or less under chloroform for a period of sixteen hours. He used a whole pound of the drug. He was careful to allow plenty of air, and had intermitted the administration to allow of food being taken.

Dr. ORR thought that when he had had difficulty in the administration of chloroform it had always been his own fault. Both breathing and pulse should be carefully watched throughout.

Dr. HALFORD considered that what was usually called the "open" method was entirely unsatisfactory. Referring to the pupil as a guide, he said it was the most reliable, but even it was inclined to mislead at times. He related that a few days previously he had been giving chloroform to a man. While the conjunctivæ were still sensitive, and before operation began, the pulse failed, the face blanched, the lips and nails became bluish, and the skin also became pallid and moist. He gave strychnia and nitrite of amyl. The pulse for a few seconds stopped, and then went on again for a few beats, and so on. The respiration continued all the time. He considered the trouble due in this case to a depressing effect on the cardiac ganglia. The patient recovered. He had one death under the drug. The man was struggling under the early part of the administration, and had taken less than a drachm and a-half. The day was hot, and the drug did not act rapidly. As the struggling was producing some blueness he ceased to give chloroform, and felt the pulse. It only beat once after. The corneal reflex was present, and the pupil acted to light. He gave nitrite of amyl, and raised the foot of the table. He would have given artificial respiration, but that the breathing continued. As soon as the latter failed the artificial respiration was begun. Breathing resumed, but the pulse never beat again, and respiration finally ceased altogether. As to the cause of death, *post mortem* disclosed acute dilatation of the walls of the right ventricle, whose walls were only one-eighth of an inch thick at their thickest part. The patient was not stood up at any time.

Dr. CAMERON said that the open method was entirely unsatisfactory; it was impossible to be accurate. He saw men using drop-bottles, improvised very often by cutting a slit in a cork, and he thought that it was impossible to be sufficiently accurate in this way. In St. George's Hospital they used chloroform with a Junker's inhaler, and instead of using a drachm in five minutes, as one speaker had related, such an amount would last half-an-hour, so great was the regulating power of the Junker. They generally used ether at that hospital, reserving the chloroform for such as had troubles contra-indicated for ether. Dentists' chairs were usually bad in that they did not permit of a complete horizontal position. He thought the chief thing in the restoration process was the artificial respiration. He agreed with Dr. Brockway about the pupil. It was only a little difficult to distinguish between the stage of dilatation, which preceded the stage of contraction, and that which followed.

Dr. JACKSON said that his experience was pretty large in the administration of chloroform, extending over about twenty years, the last sixteen of which he had been in the Brisbane Hospital. In that time he had administered it himself hundreds of times, and had probably been present at nearly 2,000 administrations. He had seen only one death. In the large majority of these—almost all—the inhaler used had been the ordinary wire and flannel, without the hole in the top spoken of by Dr. Brockway. He had heard Dr. Halford and Dr. Cameron condemn the open method, and he had recently read a communication to some journal which almost suggested that it was criminal to use it. It was hard to expect him (Dr. Jackson), in view of his long and specially favourable experience of it, to believe such a condemnation to be justifiable. As to the inhaler, he had seen inhalers which were used by experienced men which to himself appeared simply diabolical according to what he had been taught. He knew of one form of inhaler used by a man of vast experience which was simply a cup with a slit out in the side of it to fit the nose into it, and its edge so cut out as to fit tightly over the lower lip; there was no opening in the bottom of it to admit air, and the man who invented it had been accustomed to jam it down tight over the nose. He never had any deaths with it, and used it for years. To the speaker it seemed to be an instrument having everything it should have not, and contravening all he had been taught. Various men had different inhalers and different methods. His advice to a man who had any considerable experience without fatalities was to stick to the method he was familiar with. It was probably not the inhaler, but the method and rapidity of the administration with it which signified. As to the drop-bottles which had been condemned, he generally used a good drop-bottle; and if he thought or believed that it was not possible to be accurate and regular with it, he should cease giving chloroform altogether. As to the pupil as a guide, in his earlier experience he had not used it. He paid attention to the breathing and complexion chiefly, to the pulse next, and lately had turned his attention also to the pupil. It was most important to watch the complexion as a most invaluable guide. The administration should of course be gradual and regular, and in this connection he would remind the speaker who referred to the use of a drachm in five minutes that evaporation accounted for a good deal of this, but that under ordinary conditions a drachm would suffice for a lengthier operation. It must be admitted frankly that in every case in which syncope occurred during the administration an overdose had been given. He wanted to say that in the Brisbane Hospital during twenty years or more there had been only three deaths, though the administrations had been thousands; that Junkers or other inhalers than the flannel ones had been conspicuous by their almost complete absence. Such a result compared most favourably with places where the accurate inhalers were used; and while he did not, of course, attribute bad results to the Junker for instance, it only pointed to what he had alleged, that the inhaler did not so much matter as to the way in which it was used. His own habit was to keep the patient only just insensitive, just on a border line, rather a little sensitive than not; so long, in fact, as the patient was still enough for the operator's purpose, he was content.

Dr. CONNOLLY used chloroform very freely, and gave it on a towel. It was stated that the use of chloroform was attended with less risk in India, and he thought that the same applied to Queensland. He drew attention to the condition observed in children who remained so long insensitive at times after the

administration had been ceased. He agreed with Dr. Jackson as to the degree of anaesthesia, and liked to keep the patient as near the border line between slight sensitiveness and insensibility as possible, and as consistent with the purposes of the operation. He had looked upon those who used drugs, especially alcohol, as peculiarly unsuited for chloroform. He thought probably Dr. Halford's fatal case was an alcoholic.

Dr. TAYLOR, in reply, was pleased that the discussion had been so general, and in reply to Dr. Francis' question said that in cases of vaso-motor paresis or paralysis the pulse gradually failed and the face became blanched, the respiration and heart's action ceasing almost simultaneously. In cases of congestion of the medulla with paralytic dilatation of the heart, the face and neck were congested and veins swollen. There could not be any difficulty in distinguishing between the two classes of cases, the appearances being so opposite. In the case of the syncope with congestion of the medulla, etc., it was right and necessary to upend the patient, even to the erect position if required, but he should not be kept there too long; the head should be raised till the face blanched, then lowered to the horizontal position. The Hyderabad Commission said that the respiration always ceased first, but in certain cases the pulse certainly failed first. He agreed with Dr. Brockway that the stage at which the administrator should stop was that of marked contraction of the pupil. He had brought out a Junker from the old country some years ago, but had soon stopped using it. He had seen the metal case referred to by Dr. Jackson used in a case of ovariectomy. The patient soon ceased to breathe, and when restored the operation was abandoned till another time. Junker was then tried, but another administrator flung it aside, and gave the drug on a towel successfully. It is therefore much a question of habit. He himself used a bottle whose cork had a slit in the side of it. The position of the body in the treatment of the two kinds of syncope under chloroform was a most important point to be noted.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

OTAGO SECTION.

MEETING held April 27th, 1898. Present:—Dr. Closs (chair), Drs. Barnett, Batchelor, Ferguson, McKellar, McPherson, Emily Siedeberg, Smith, W. M. Stenhouse.

A letter from Mrs. McKenzie, Auckland, re education of imbeciles, was read and received.

Drs. Falconer, Young, and A. Stenhouse were nominated for membership.

The alterations in the bye-laws of the New Zealand Branch, as proposed by Dr. Mason, of Otaki, were approved.

Dr. Closs read a paper on "The Increase of Hydatid Disease in Dunedin and the City Water Supply." He took his statistics from the Dunedin Hospital reports, which showed a slight but steady increase in the disease. He held that the water supply was to a considerable extent responsible for this increase, and he pointed out in an interesting and comprehensive manner the many defects in the present methods of collecting and distributing the water.

The paper led to a lively discussion, and a resolution was passed thanking Dr. Closs for his paper, and appointing a committee consisting of Drs. Closs, Ogston, and Barnett, to bring under the notice of the City Council the most important of the defects referred to.

Meeting held May 25th, 1898. Present:—Dr. Closs (chair), Drs. Barnett, Batchelor, Colquhoun, Ferguson, Hocken, McKellar, Riley, Smith.

The Secretary was directed to write to Dr. Kingston-Fyfe, of Wellington, asking him to act as permanent delegate for the Otago Section at the Council meetings.

Drs. Colquhoun and Hocken then gave descriptions of their recent trip to the South Sea Islands. They pointed out that the steam service and the accommodation were both very satisfactory, and the trip could safely be undertaken by many types of invalids. Amongst the disadvantages were the great heat and the mosquitos and flies. An interesting account of the prevalent disease "yaws" was given, and the arguments stated for and against its syphilitic origin. Cases of malaria, tuberculosis, elephantiasis, leprosy, and ophthalmia were also referred to, and a description of the wonderful fire-walking ceremony of the Fijians was given.

Meeting held June 29th, 1898. Present:—Dr. Barnett, vice-president (in the chair), Drs. Batchelor, G. Brown, Fulton, Ferguson, G. Macdonald, McKellar, Macpherson, Riley, Roberts, and Emily Siedeberg.

A letter was read from the Canterbury Section laying before the Otago Section the results of the voting of the Canterbury members on the question of publishing medical biographies in the "N.Z. Encyclopaedia." There was an overwhelming majority against such publication. The Otago Section unanimously endorsed the opinion of the Canterbury Section.

A letter was read from the town clerk calling the attention of the members to their laxity in regard to the regulations for notification of infectious diseases. The letter was received. Several members referred to the indefensible attitude taken up by the City Council in refusing to pay the statutory fee of 2s. 6d. to practitioners notifying infectious diseases.

The minutes of the Council meeting held in Wellington on June 4th, 1898, were laid on the table for perusal by members.

Dr. Batchelor then read a paper on a case of "Caesarian Section" (published in the August issue of the *Australasian Medical Gazette*), which was listened to with the greatest interest, and at the close Dr. Batchelor received the congratulations of those present at the very successful result of the operation. Drs. Barnett, Roberts, Macpherson, G. Macdonald and Riley discussed the case at considerable length.

Meeting held July 27th, 1898. Present:—Dr. Closs (in the chair), Drs. Batchelor, Colquhoun, Emily Siedeberg, Riley, Roberts, Fulton, Smith and McKellar.

After some routine business Dr. Colquhoun read his excellent paper on "The Prevailing Epidemic of German Measles." (See page 374).

Dr. BATCHELOR referred to several cases under his care in which German measles had attacked the patients soon after operation. Septic symptoms and suppuration occurred, leading to very grave and in one case fatal complications. He considered that the sepsis was in some way traceable to the bacteria of German measles, as he had relaxed none of his usual precautions in the way of antiseptic technique.

Dr. CLOSS mentioned two analogous cases in which it seemed probable that German measles had led to suppuration.

Dr. COLQUHOUN then mentioned the necessity of the town clerk publishing the locality in which infectious diseases occurred, and a resolution was passed calling the attention of the town clerk to the importance of this point.

PROCEEDINGS OF OTHER SOCIETIES.

BALLARAT DISTRICT MEDICAL SOCIETY, VIC.

THE annual meeting of the above Society was held at Ballarat on July 28th. Present: The President (Dr. Salmon), Drs. R. Scott, Champion, Richards, Gardiner, Beattie Smith, Cussen, Usher, Guthrie, Affleck Scott, and Mitchell (hon. sec.). Apologies were received from Drs. Corry, Jordan, Morrison, Palmer, Pincock, and Tremearne.

Minutes of the last annual meeting were read and confirmed. The balance-sheet and annual report, as printed, were received and adopted.

Correspondence was received from the Victorian Branch of the British Medical Association formally accepting and acknowledging this Society as a District Branch of the British Medical Association; also from Mrs. W. P. Whitcombe, thanking the members of the Society for their interest in erecting a memorial to her late husband (Dr. Whitcombe).

Dr. R. SCOTT moved, "That for the future the financial year of this Branch end at the same time as that of the Victorian Branch of the British Medical Association." Carried unanimously.

Dr. BEATTIE SMITH moved and Dr. AFFLECK SCOTT seconded, "That the next annual meeting be held on the last Thursday in January, 1900." Carried.

Accounts amounting to £5 15s. 9d. were passed for payment.

The retiring President then gave an address (reported at page 371).

A hearty vote of thanks was passed to Dr. Salmon for his address, and, on replying, he introduced Dr. Robert Scott as his successor in the presidential chair.

Dr. SCOTT took the chair amid applause, and thanked the members for their confidence in and regard for him.

The PRESIDENT then declared the following officers elected: Vice-president, George Palmer, M.B.; hon. treasurer, E. Guthrie, M.B.; hon. secretary, J. T. Mitchell, M.D.; committee, Drs. Affleck Scott and Beattie Smith. Messrs. W. E. F. Smythe and B. A. Cue were appointed honorary auditors, and a hearty vote of thanks was passed for services rendered.

Dr. SALMON moved, "That a sub-committee, consisting of the president, hon. treasurer, and hon. secretary, be appointed to consider and report upon by-laws for the government of the Branch." Seconded by Dr. CHAMPION, and carried.

Dr. MITCHELL moved, and Dr. RICHARDS seconded, "That this meeting recommend that a nurses' registry be established in Ballarat." The matter was left in the hands of the hon. secretary to endeavour to arrange for such a registry.

Resignations of Drs. E. Ken Herring and A. N. Chenhall were accepted with regret.

Dr. USHER exhibited a copy of "The British Pharmacopoeia, 1898."

Dr. J. MORISON GARDINER exhibited the following specimens—Brain, showing military tuberculosis; brain, showing softening gumma; cystic kidney, containing uric acid calculus; heart, weighing 44 ounces, with valvular disease.

New Member.—Dr. C. H. W. Hardy, M.B., Ch.B. was unanimously elected a member of the Branch.

A vote of thanks to the chair closed the meeting.

ANNUAL REPORT OF THE BALLARAT DISTRICT
MEDICAL SOCIETY

(Submitted at the meeting held at Club Hotel, Ballarat, on Thursday, July 28th, 1898).

Your committee has much pleasure in submitting the annual report. During the past year meetings have been held quarterly, and the larger attendance of members have shown an increased interest in the discussions following the reading of papers. Although the original contributions have been comparatively few in number, they have been more than usually interesting, and it is to be noted that new blood has been imported into the list of contributors.

The membership numbers 29, being an increase of one in the year. The acceptance of honorary membership by Sir Thomas Fitzgerald is a graceful recognition, by a leader of our profession, of the objects and aims of our Society. Mr. T. R. Treloar has also been elected an honorary member. His scientific assistance to the profession in skiagraphy and bacteriology merits our thanks.

Our president has made a successful appeal to the profession generally to provide a memorial to our late *confrère* Dr. W. P. Whitcombe, an esteemed past president. The memorial took the form of an iron railing surmounting a bluestone base surrounding the grave, and bearing an appropriate inscription.

The achievement of the year to which we would wish particularly to direct your attention is the acceptance of our Society as a Branch of the British Medical Association. To-night the Ballarat District Medical Society ceases to exist, after an honorable career of more than 12 years, and we shall henceforth be known as the Ballarat District Branch of the B.M.A. It is sincerely to be hoped that, with the wider scope of the Society and its independent tribunal for the settlement of ethical questions, there may be a large addition to our membership. We believe that the basis of the British Medical Association is broad enough to include the whole of the profession, and we offer a cordial welcome to all medical practitioners in our wide district—extending from Ballan to Serviceton—to unite with us for the benefit of their profession.

During the year the following papers were read:—"The Certifying of the Insane," by W. Beattie Smith; "A Case of Purpura Hæmorrhagica," by E. Ken Herring; "Notes on some Midwifery Cases," by C. A. Courtney; "*Folie à Deux*, or Associated Insanity," by W. Beattie Smith; "A Case of Aortic Disease, with Embolism," by J. Morison Gardiner; "The Etiology of Infection," by T. A. Wilson; "Notes on a Case of Cerebral Abscess," by J. Morison Gardiner.

Subjoined is the balance-sheet showing the financial position of the Society:—

RECEIPTS AND EXPENDITURE, BALLARAT DISTRICT MEDICAL SOCIETY.

From July 29th, 1897, to July 28th, 1898.

DR.	£	s.	d.	CR.	£	s.	d.
To Magazines	19	6	6	By Bank Balance, July, 1897	1	6	7
Printing	2	6	0	Members' Subscriptions	27	5	6
Addresses	5	5	6	Balance	2	6	1
Von Müller Monument... ..	1	1	0				
Wreaths	1	11	6				
Deed Box	0	16	0				
Sundries	0	11	8				
	£30	18	2		£30	18	2

Deposit Account—F.D.R. @ $2\frac{1}{2}\%$ £77 10 8

E. and O.E.

RICHARD A. CUE, } Hon.
F. G. HAYMES, } Auditors.

July 22nd, 1898.

E. GUTHRIE, Hon. Treasurer,
JAMES T. MITCHELL, Hon. Secretary,

"TABLOID" HYPOPHOSPHITES COMPOUND.—"Tabloid" Hypophosphites Compound provides a method of administering this combination, which possesses obvious and specific advantages. The full therapeutic activity of all the constituents is obtained, and there is no danger of an over-dose of strychnine, either through a mistake in measurement or through precipitation. In the "tabloid" preparation the dose is constant and unvarying, and the preservation of the ingredients is assured. Many patients who are actively engaged in business or professional life, and who cannot carry about the ordinary forms of medicine, can take "Tabloid" Hypophosphites Compound regularly and without inconvenience. For those patients, too, suffering from various functional

nerve disorders, who are ordered long periods of travel "Tabloid" Hypophosphites Compound provides a means of prescribing the hypophosphites which is reliable and convenient, and encourages regular administration. Two strengths are issued, each in bottles of 25 and 100. "Tabloid" Hypophosphites Compound, gr. 1-1/2, contains gr. 1/128 of Strychnine Hypophosphite, together with the combined Hypophosphites of Calcium, Potassium, Manganese, Iron and Quinine, and is equivalent to dr. 1/2 of standard Compound Syrup of Hypophosphites. "Tabloid" Hypophosphites Compound, gr. 3, contains gr. 1/64 of Strychnine Hypophosphite, together with the combined Hypophosphites of Calcium, Potassium, Manganese, Iron and Quinine, and is equivalent to dr. 1 of standard Compound Syrup of Hypophosphites.

THE ROYAL SOCIETY OF TASMANIA—MEDICAL SECTION.

THE usual monthly meeting of this Section was held on August 3rd, when the following members were present:—Drs. Bright (President, in the chair), Clarke, Ireland, Giblin, Spark, Scott, Alsop, Crouch, Walsh, and Sprott. Minutes of last meeting were read and confirmed. Secretary apologised for the absence of Drs. Drake and Wolfhagen.

Dr. IRELAND exhibited a case of spastic paraplegia in a man aged 43 years.

Dr. SPROTT read a paper on the "Cause and prevention of Typhoid Fever," with reference to the metropolitan drainage scheme for Hobart.

It was resolved that Dr. Sprott be requested to read his paper before the full meeting of the Fellows of the Royal Society, to be held on August 8th.

It was resolved that the Committee bring up a report to the next meeting as to the funds in hand, and the books the Committee would recommend to be purchased for the library.

MEETING OF COUNCILLORS OF NEW SOUTH WALES MEDICAL SOCIETIES.

A MEETING of the Councils of the Medical Societies of New South Wales was held at the Editor's Library, 121 Bathurst Street, on August 31st. The meeting had been convened by the Eastern Suburbs Medical Association by a circular issued early in August. The object of the meeting was to devise the best means for bringing before the Government the extreme necessity for a good Medical Act, and an Indecent Advertisement Suppression Act, and similar business.

The chair was taken by Dr. L. E. F. Neill, the President of the Eastern Suburbs Medical Association. There were present representatives from the following Medical Societies:—New South Wales Branch of the British Medical Association, New South Wales Medical Union, New South Wales Medical Benevolent Fund, North Sydney Medical Society, Western Suburbs Medical Association, Eastern Suburbs Medical Association. The following resolutions were submitted and carried unanimously:—

(1.) "That this meeting of the councillors of the New South Wales Medical Associations strongly approves of placing a good Medical Act upon the statute-book of the colony." (Proposed by Dr. J. Adam Dick, seconded by Dr. C. Dagnall Clark.)

(2.) "That this meeting strongly approves of the placing of an Indecent Advertisement Suppression Act upon the statute-book of New South Wales." (Proposed by Dr. G. E. Rennie, seconded by Dr. R. L. Faithfull.)

(3.) "That this meeting requests the Council of the British Medical Association to cordially take action in accomplishing the foregoing matters." (Proposed by Dr. J. Adam Dick, seconded by Dr. G. Lane Mullins.)

(4.) "That this meeting suggests to the Council of the New South Wales Branch of the British Medical Association the advisability of electing annually a Medico-Parliamentary sub-committee to watch all Medico-Parliamentary matters. (Proposed by Dr. J. Adam Dick, seconded by Dr. Ralph Worrall.)

The foregoing resolutions were transmitted to the Honorary Secretary (Dr. G. E. Rennie) New South Wales Branch British Medical Association on the same night.

A reply has been received by the Honorary Secretary (Dr. J. Adam Dick) Eastern Suburbs Medical Association as follows:—"September 3rd. Sir, I have the

honour to acknowledge yours of the 31st August, forwarding certain resolutions passed at a meeting of the combined councils, and to inform you that Dr. Knaggs has been appointed by this council to watch the progress of medical bills in Parliament."

ROYAL SOCIETY OF NEW SOUTH WALES—MEDICAL SECTION.

THE monthly meeting of the Section, for August, was held on Friday, August 16th, at 8.15 p.m., at the Society's house, 5 Elizabeth Street N. Dr. G. E. Rennie, the Chairman of the Section, presided. There were thirty members and visitors present. The minutes of the preceding meeting were confirmed.

Exhibits showing various forms of leucocytes were shown by Dr. Frank Tidswell. Several recent additions to the University museum of normal and morbid anatomy were shown by Dr. Sydney Jamieson.

A paper upon "Disinfection of Dwellings in Notifiable Infectious Disease" was read by W. G. Armstrong, M.B. Syd., D.P.H. Camb., M.O.H. for the Metropolitan combined districts. The reading of the paper took up about thirty minutes. An interesting discussion followed in which the following took part:—Drs. J. Ashburton Thompson, W. H. Goode, F. H. Quaife, T. Fiaschi, C. P. B. Clubbe, Frank Tidswell, H. V. C. Hinder, W. Camac Wilkinson, and W. Spencer.

Owing to the lateness of the hour it was resolved that the discussion be resumed at next meeting.

REVIEW.

SOME POINTS IN THE ANATOMY, PATHOLOGY, AND SURGERY OF INTUSSUSCEPTION. By D'Arcy Power, M.A., M.B. Oxon; F.R.C.S. Eng.; Surgeon to the Victoria Hospital for Children; Hunterian Professor of Pathology and Surgery at the Royal College of Surgeons of England; Surgical Secretary of the Pathological Society of London. 82 pages; illustrated. London; The Rebman Publishing Co. 1898. Price, 4s.

This short book is an expansion of the Hunterian Lectures delivered by the author before the Royal College of Surgeons in February, 1897. It comprises three chapters, the first dealing with the minute anatomy, the second with the pathology, and the third with the treatment of intussusception. The subject of minute anatomy is very fully treated, data being obtained from experimental lesions, and from the vast amount of material in the various London museums.

Pathology is studied from anatomical, physiological, and clinical data. As a result, stress is laid on the importance of the relation between the relative diameters of colon and ileum, the length of the ileocolic mesentery, and the disposition and size of the ileo-cæcal folds, as determining factors in the causation and course of intussusception.

Under the heading of Treatment, the relative value of irrigation and laparotomy is fully and ably discussed. The method of performance of each, and its attendant risks, are carefully described. On the whole, the author tends to the use of irrigation in simple, uncomplicated cases, if seen within 48 hours of the onset of symptoms, as an initial step, followed, if necessary, by operation.

The book teems with points of interest, and the Chapter on Treatment should be read by every practitioner as a guide to the correct treatment of an affection in which each step must be taken rapidly, and in which one false step is fatal.

(Continued on page 417).

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

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SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

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THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
R. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH SEPTEMBER, 1898.

EDITORIALS.

DISEASED MEAT IN SYDNEY.

THE subject of the consumption of diseased meat as food has recently been brought prominently forward in Sydney. A few months ago we drew attention to the fact that impure and adulterated food was disposed of to the public, and now it is our duty to again refer to this matter.

The discovery of tuberculous and putrid meat exposed for sale in some butchers' shops has demonstrated the urgent necessity that exists

for legislation upon this matter. Rigid inspection of all animals slaughtered at the Glebe Island abattoirs is carried out, and this is a safeguard to a certain extent. But unfortunately much of the meat consumed in Sydney is killed, not at Glebe Island, but at other slaughter-houses, where there is little or no supervision exercised to prevent diseased meat from finding its way into the kitchens of consumers. It is a well-known fact that many farmers having markedly diseased cattle or pigs, send them to those slaughter-houses where inspection is seldom or never carried out. To send such animals to Glebe Island would result in their destruction and entail monetary loss.

The time has now arrived for active steps to be taken to prevent the spread of disease from animals to man from this cause, and we are pleased to find that many of our legislators are waking up to this necessity. We should, however, prefer to see the Government of the colony leading the way and bringing in a bill to reform the present practice of slaughtering animals intended for human food in other than recognised houses. Large numbers of cattle and pigs—apparently healthy when they arrive at the abattoirs—are condemned as tuberculous or otherwise unfit for food when examined *post mortem*.

The question then presents itself to us: What are the best means to adopt to obtain a sound meat supply for the metropolis? In our opinion—

1. No cattle should be permitted to enter the colony until they have been successfully tested with tuberculin.
2. Buyers of animals for slaughter should purchase only on the condition that the animals are tested with tuberculin before slaughter, the seller (who is responsible, though ignorantly, perhaps, for the condition of the animal) bearing the loss in case of the animal being found tuberculous.
3. All meat intended for consumption within the metropolitan area should be slaughtered in abattoirs under the control of the Government or the Board of Health.
4. If this be impracticable, the animals slaughtered under other than recognised supervision should be sent to a central dépôt within the metropolis, and there examined by competent inspectors before being exposed for sale in butchers' shops.

5. All meat exposed for sale should bear a stamp showing that it has been examined and found fit for food. Pork and salted meats should be included in this provision. The fabrication of such stamp should be punished as a forgery.
6. Imported carcasses should be sent to the central depôt above mentioned, and examined and stamped before being sold for food. Tinned and preserved meats should be sampled and
 - examined by experts at the Custom-house.

We would also advise that the recommendations of the British Royal Commission on Tuberculosis with regard to Meat Inspectors be adopted here. These are, that in future no person be permitted to act as a Meat Inspector until he has passed a qualifying examination in the following subjects:—

- (a) The law of meat inspection, and such bye-laws, regulations, etc., as may be in force at the time he presents himself for examination.
- (b) The names and situations of the organs of the body.
- (c) Signs of health and diseases in animals destined for food, both when alive and after slaughter.
- (d) The appearance and character of fresh meat, organs, fat, and blood, and the conditions rendering them, or preparations of them, fit or unfit for human food.

We believe that the measures we have here briefly indicated would, if properly carried out, lead to a pure meat supply in Sydney, and would put a stop to the sale of tuberculous and putrid meat in the shops of unscrupulous traders. The poorer classes of the community are led by necessity to purchase cheap meat, not knowing that cheap meat is but another name for diseased, impure, or otherwise improper food. The public must not be allowed through ignorance or poverty to bring disease upon themselves and their families.

PUBLIC HEALTH IN TASMANIA.

THE annual report for the year 1897 of the Central Board of Health, Tasmania, has just been presented to Parliament.

It reveals a somewhat satisfactory condition of the general health of the colony. The death rate for the year was 11.53 per 1000 living, being slightly lower than that of last year, and much below the average for the last ten years. We congratulate the Board on the continued

decrease in the general death rate, which is certainly very low.

There are, however, matters in connection with the preventable diseases that are not so satisfactory, and more especially those relating to typhoid fever. We are told there were 492 cases reported, with 47 deaths, as against 276 cases notified, with 45 deaths, in 1896—the mortality being 9.6, as against 15.8 per cent. in the preceding year; the lower mortality being attributed to the larger number of cases that are now treated in the hospitals. The incidence of the disease as regards locality is worth noting. The two principal cities—Hobart and Launceston—contributed 171 cases, or 35 per cent. of the total, while Beaconsfield is credited with 81, Lefroy 17, Queenstown 57, Zeehan 13, Macquarie 15, and Hamilton 30. These six townships contributed 213 cases, or 43 per cent., while the remainder of the country districts were only responsible for 103 cases, or 21 per cent. of the total. We regret the report does not give us any idea as to the cause of typhoid in these centres, except in the case of Hamilton, where it “is certainly in part due to the inferior quality and insufficient quantity of the water supply.” Neither does the report tell us what steps have been taken in these districts to prevent a recurrence of the disease. The Board has taken much interest in connection with the schemes for improving the water supply of several of these townships; but what that exactly means is best known to the Board.

We contend that where a disease such as typhoid attacks the community to the extent of 18 in every 1000 living, as it did “in Beaconsfield, Queenstown, Lefroy, Zeehan and neighbourhood,” something more than a mere official record of the fact is required. The existence or absence of endermic typhoid is a fair index of the sanitary condition of any locality. This is seen in Hobart and Launceston, where, we presume, the sanitary conditions are more strictly enforced; the attack rate of typhoid is only 3.5, as against 18 per 1000 in the above townships. We are convinced that a full enquiry into the sanitary state of these townships is imperative, and do not hesitate to say that, if carried out by a competent officer, that defects will be found which the authorities ought to insist upon being remedied.

There were 150 cases of diphtheria, with 13 deaths, as compared with 114 cases and 12 deaths in 1896. The more general use of anti-toxin in the treatment of this disease is credited with the reduction in the mortality of cases treated.

The vexed question of vaccination is again touched upon, and the promised bill to amend the vaccination has, we learn from the newspaper files, passed both Houses of the Legislature, and will come into force January 1st, 1899. What the effect of the "Conscientious Objection Clause" will be is a mere matter of speculation; but, as only 29 children were vaccinated during the year, we fancy a large section of the community will avail themselves of its provisions.

The report deals with the food supply—especially milk and meat—and goes on to state that 6,600 administrative acts of various kinds were performed under the Public Health enactments. Complaint is made by the Board that several districts have not yet got a local authority to supervise the sanitary affairs, and that some of the local authorities are without medical officers to advise the powers that be in matters pertaining to public health. Perhaps what startles one more than anything else in the report is that the whole of the work of the Board has been done "with a grant of less than £450 from the Treasury." How the Central Board of Health of Tasmania can carry out its duties efficiently with such a sum is beyond our comprehension. It savours of the penny wise and pound foolish, and explains to a large extent the absence of anything like full enquiry into the cause and prevention of the Zymotic diseases.

We believe the Board has done good work with the means at its command, but do not hesitate to say the amount is totally inadequate to carry out the work of such an important body as the Central Board of Health.

THE DRAINAGE OF THE CITY OF HOBART, TASMANIA.

It is lamentable to think at the close of the nineteenth century there should exist so much indifference in matters of sanitation. Sir Philip Fysh, who we believe is also chairman of the Metropolitan Drainage Board, on introducing a Bill to provide a better system of sewerage and drainage for the city of Hobart and suburbs, stated in the Tasmanian House of Assembly that for the past twelve years he had been urging upon the citizens the desirability of initiating such works, but until lately his efforts had been frustrated by a stolid opposition.

It is gratifying to find, however, that the people of Hobart have become alive to the fact that the penalty for inattention to matters pertaining to the public health is sickness and even death, and that the measure to give effect

to a better order of things has passed the Legislature. The scheme, though not a gigantic one, is estimated to cost something under £100,000, but before the money can be borrowed a *plebiscite* of the people must be taken, and the majority of votes decides for or against the scheme.

How the people view the proposed scheme we cannot say, but we anticipate before they incur the responsibility of rejecting a work which would ultimately benefit the general health, and even enhance the value of their properties, they will acquaint themselves with the good results that have been attained in other cities where proper sewerage systems have been adopted. With this object in view, we would commend for their careful consideration a communication presented to the Royal Society of Tasmania by the Hobart Health Officer. He clearly shows there the superiority of the water-carriage system over every other method of organic refuse disposal. We are in entire accord with the views expressed in Dr. Sprott's paper, and do not hesitate to say it is the only system which can be carried out efficiently where people are congregated in densely-populated centres. With reference to typhoid fever, with which the paper more especially deals, the opinions held are those accepted by authorities who have studied the subject. It is an indisputable fact that wherever a properly-constructed drainage system has been established the mortality from typhoid has diminished as a consequence.

Numerous instances might be quoted in England and the continent of Europe, and the results there harmonise with the experience of Adelaide, Wellington, and our own city of Sydney. Hitherto typhoid fever was looked upon as an urban disease; now, with improved sanitary administration, better water supply and drainage works, many rural districts have a mortality in excess of the city populations. Dr. Sprott might have gone further, and said that typhoid was not the only disease affected by good drainage. Cholera has been practically banished from England through improved water supplies and drainage works. Diarrhoea and other diseases depending upon soil pollution have been reduced in mortality; while the drying of the soil, consequent upon better drainage, as was pointed out by the late Sir J. Simon and Dr. Buchanan, reduced the mortality of phthisis in every town where such works were effected, from 11 in Merthyr to 49 per cent. in Salisbury.

It is not an easy matter, however, to convince a prejudiced public; and no sanitary

reform, however desirable it may be, has been accomplished without opposition. So, in Tasmania, we find objections are being made on the score of cost, insufficient water supply, and to the way in which the Bill provides for the disposal of the sewage. The question of cost, however, cannot be a serious one. At the present time the sanitary service costs about £5,000 per annum, and the engineer estimates that this annual amount will be ample to pay for the water-carriage system. A provision is made in the Bill to capitalise the whole of the household connections, as well as the interest on the money borrowed during the construction of the works; and the maximum rate the Board can levy is sevenpence in the pound (the present rate being fivepence), an amount which cannot be held as excessive considering the benefits to be received.

Nothing is so essential to a well-conducted sewerage system as a good water supply; and, as pointed out in Dr. Sprott's paper, "a sewerage system without a sufficient water supply would be a dangerous institution to establish."

In Hobart the estimated supply is 63 gallons per head per diem, and in the driest season it has never been less than 50 gallons. This quantity is certainly in excess of that supplied to most water-closet cities, and is considerably more than we have in Sydney. There is no good reason why Hobart should require an excessive amount of water. The city is admirably situated for drainage purposes, being built on a slope which rises gradually from the shores of the Derwent; and as the proposed works deal only with the rain-water from roofs and paved yards, and not the ordinary storm waters, flushing should be a matter of comparative ease. Fifty gallons ought to be an ample supply for Hobart, and if properly conserved we have no fear of any evil results arising from this source.

With reference to the disposal of the sewage two outlets were originally proposed. Both provided for the discharge of the crude sewage into the tidal waters of the River Derwent, but at different points. It was thought probable that if the sewage was discharged at Macquarie Point the shores of the Derwent would be polluted; on the other hand, the cost of taking the sewage to One Tree Point, a distance of three miles nearer the open ocean, meant an additional cost of £40,000. Before deciding the outlet the opinion of Mr. Napier Bell was sought, and though he reported that no objection could be taken to Macquarie Point, he recommended the outlet to be at One Tree Point, because popular feeling was in favour of it.

Most sanitarians will agree with Mr. Napier Bell that it is advisable to carry away all filth as far as possible, and prevent even the possibility of a nuisance being created. We do not, however, anticipate that any evil results will be experienced in discharging the sewage at Macquarie Point, as the Board has decided to do. At the point of discharge the Derwent is about a mile in width, and over 60 feet deep. The volume of water is so great that for every part of sewage there will be millions of times its own bulk of sea-water to dilute it. Such a dilution as this in a swift-flowing current and a rapid chemical destruction of all organic matter, it is highly improbable that any pollution can take place.

In supporting the system now being inaugurated, and which we hope to see soon carried into effect, we do not hesitate to say that, if properly constructed, it cannot be anything other than effectual in improving the public health and the well-being of the residents of the district. Failure can only result through ignorance in construction or carelessness in its future management. We commend the Health Officer of Hobart on the earnest efforts he is making to improve the sanitary condition of his district, and we congratulate him on the excellent paper in which he has so lucidly shown how improvement may be made. We trust that his efforts may not be in vain, and that Hobart will soon occupy the proud position of being the most sanitary, as well as the most healthy, capital of the Australias.

ANNOTATIONS.

DEPARTURE OF DR. RENNIE FOR ENGLAND.

DR. G. E. RENNIE being about to proceed to London for a lengthened period, has resigned his appointments as Deputy-Coroner, Hon. Physician and Pathologist to the Prince Alfred Hospital, Examiner in Pathology to the University of Sydney, Hon. Secretary of the N.S.W. Branch of the British Medical Association, etc., etc. On notifying his intended resignation to the Council of the last-named body at its meeting on August 26th, the following resolution was unanimously passed: "The Council of the N.S.W. Branch of the British Medical Association, having heard with regret of the intended resignation of the Hon. Secretary, desires to place on record an expression of its appreciation of the valuable services rendered to the Branch by Dr. G. E. Rennie, as Hon. Secretary since May, 1896. The members of the Council desire to assure Dr. Rennie of their hearty good wishes for his welfare during his projected trip to the old country."

Dr. Rennie has for so long held a foremost position amongst us as a pathologist that his departure will be a great loss to the profession of the colony.

The Medical Staff of the Sydney and Suburban Provident Medical Association—a society formed on the lines of the Eastbourne Association, and of which Dr. Rennie was the originator and Hon. Secretary from its formation—instituted a fund for presentation

to him, which has been supplemented by some of the metropolitan members of the British Medical Association who are not on the staff of the former. The presentation took the form of a purse of sovereigns from each Association (amounting in all to £71) and a joint address bearing the *fac simile* of the signature of each of the 61 contributors. The address, which was in book form, with the monogram in solid gold letters on the outside, was got up in Mr. John Sands' best style. It was formally handed to Dr. Rennie together with the purse of sovereigns from members of the branch by Dr. W. Chisholm (President) at a largely attended meeting of the contributors, on Friday, 16th inst. Dr. Rennie suitably replied.

A meeting of the Sydney and Suburban Provident Medical Association was held at 121 Bathurst Street, on 6th September, with the object of presenting Dr. G. E. Rennie with an address and a purse of sovereigns, as a token of the esteem in which he is held, and as an acknowledgment of the valuable work he has done in connection with the above Association, and expressing at the same time the regret occasioned by his resignation of the Secretaryship of the Society, in consequence of his early departure for London, where he purposes remaining for some considerable time. Present: Drs. Crago, Worrall, Gill, West, Walker-Smith, J. Adam Dick, Mills, Rennie, Litchfield, O'Hara, Jamieson, Gordon MacLeod, R. Pope and Carruthers.

Dr. WORRALL, who presided, mentioned that he had received apologies for unavoidable absence from Drs. F. H. Qualfe, T. Fiaschi, W. Chisholm, W. Spencer, H. C. Hinder and G. H. Abbott. A letter was also read from Dr. Scot-Skirving expressing his sincere sympathy with the object of the meeting, and regretting that a previous engagement prohibited his attendance. Dr. Worrall, in presenting the address, said he would refrain from attempting to deliver an eulogistic speech on the occasion, being convinced it would be contrary to Dr. Rennie's wish to receive any such tribute to his merit. He, however, could bear testimony to the self-sacrificing labour that Dr. Rennie had devoted to the Sydney and Suburban Provident Medical Association, such work being undertaken not only for the advancement of that Society, but also for the welfare of the medical profession in general. As a pathologist, Dr. Rennie held the foremost position, and he was quite sure that in England his ability in this branch of the profession would be duly acknowledged and appreciated. He had great pleasure in presenting the address and the purse to Dr. Rennie.

Dr. RENNIE said he felt his position there that night to be a difficult one. It was with considerable pain he met the members of the Sydney and Suburban Provident Medical Association to sever his connection with the society, and to say good-bye to his professional brethren. Still, he hoped the parting would not be a final one. It would be, perhaps, invidious for him to mention some members more particularly, but he felt bound to express his special indebtedness to his colleagues, Drs. Worrall, Jamieson, Walker-Smith, West, and Crago. With the permission of the meeting he would briefly sketch the object with which the Sydney and Suburban Provident Medical Association had been started, and relate its subsequent history. The Association had been started in consequence of the action taken by the Sydney Clerks' and Warehousemen's Association, a medical benefit society, which established as a wage limit the sum of £300 a year income, but members of that society whose incomes were up to £500 or £600 per annum could participate in the medical benefits simply by making a slightly increased rate of payment. A committee appointed at a meeting

of the medical profession held in January, 1896, had communicated with the directors of the Sydney Clerks' and Warehousemen's Association, and had endeavoured to induce them to lower their wage limit. Negotiations failed to bring about a satisfactory arrangement, and at another meeting of the profession held in May, 1896, the question of establishing the Sydney and Suburban Provident Medical Association, on lines laid down by the Eastbourne Medical Society, was unanimously agreed to, limiting the wage limit to £200, and admitting no member whose total income from all sources exceeded that sum. Some opposition had had to be encountered within the profession, but he believed in the course of time it would be recognised that the association had a powerful means at its disposal to prevent the degradation of the profession at the hands of unscrupulous promoters of proprietary lodges; and if only medical men worked together with this object they would be in a very short time masters of the situation. The Sydney and Suburban Provident Medical Association had steadily gone on increasing, and it was hoped that by the end of the present year the dividend declared would be at the rate of £1 per member per annum, which compared very favourably with the rate paid by lodges at the present time. In conclusion, Dr. Rennie assured his hearers that he would watch with the keenest interest the career of the Sydney and Suburban Provident Medical Association, and he hoped and believed its success would be assured. He trusted that his successor, Dr. O'Hara, would meet with the cordial help that had been afforded him. The task undertaken was an onerous one, but with the hearty co-operation of the active and consulting staff, his labours would be greatly lightened. He begged to thank the contributors for the handsome donation presented him.

Dr. CRAGO wished to mention that the reason why more members of the Council of the British Medical Association, of which Dr. Rennie was the Hon. Secretary, were not present that night, was that the Council also purposed making Dr. Rennie a similar presentation in the course of a few days.

Dr. JAMIESON, Hon. Treasurer, Sydney and Suburban Provident Medical Association, and Drs. WALKER-SMITH and W. WEST also addressed the meeting.

Dr. NEILL, as President of the Eastern Suburbs Medical Association, Sydney, wished to testify to the courtesy he had always received from Dr. Rennie whose departure from Sydney he considered a distinct loss to the profession.

Dr. DICK hoped that eventually Dr. Rennie would return to Sydney. With regard to the Eastbourne Medical Society the population of that town was (1896) 40,000, and the Society numbered 3,700 members. He trusted Dr. Rennie would interview the Secretary of that Society, it would be interesting to him as the Sydney and Suburban Provident Medical Association was formed on the lines of the Eastbourne Society as communicated by the speaker to Dr. Rennie.

DR. DE LAMBERT SUBSCRIPTION FUND.

THE following subscriptions to the above fund have been received in addition to those already announced:

A. MacCormick	...	...	...	1	1	0
Ralph Worrall	...	...	...	1	1	0
R. L. Faithfull	...	...	...	1	1	0
W. H. Coutie	...	...	...	1	1	0

Dr. De Lambert desires us to convey to the subscribers his warmest thanks for their kind and practical sympathy.

PUBLIC HEALTH.

MEASLES, Scarlet fever, and Influenza are very prevalent in Sydney now.

Dr. Gregory Sprott, Health Officer of Hobart, recently read an excellent paper on "The Causes and Prevention of Typhoid Fever" before the Royal Society of Tasmania. At the conclusion an interesting discussion ensued.

The subject of diseased meat is now engaging the serious attention of the Health authorities in Sydney. A bill has been introduced into the local Legislative Assembly dealing with the question.

The Officer of Health (Dr. Sprott) reports that during the month of July there were 43 deaths registered in the district of Hobart, but 4 of these were of persons not usually resident in the district. In the city there were 16 deaths, 9 males and 7 females, giving a death-rate equal to 6.48 per 1,000 per annum. The principal causes of death were:—Typhoid, 2; Phthisis, 2; tuberculosis, 2; old age, 1; premature, 2; heart disease 2; and the remainder were of a general nature. Five of the deaths were of persons under one year; 10 between 5 and 65 years; and one over 65 years of age. The total number of births registered was 73. In the city 56, males 29, females 27.

A health officer in Victoria has been suspended by the local borough council for neglecting to report a case of diphtheria, which had been treated for some days in a private house, and of which the doctor was cognizant.

ANNUAL REPORT OF THE CENTRAL BOARD OF HEALTH, TASMANIA.

THE Central Board of Health, Tasmania, has issued its report for the year 1898. It states:—

The general health of the colony, though affected by epidemic visitations of typhoid fever, diphtheria, and scarlatina in certain districts, continued good. The death-rate from all causes was very slightly lowered, being 11.53 to the thousand living in 1897, as compared with 11.63 in 1896. Notwithstanding the above-mentioned visitations, which more than doubled the number of notifications received of cases of the three diseases mentioned, the death-rate from preventable diseases was only slightly higher than in the preceding year—the increase in the case-rate being over 100 per cent., while the increase of mortality was under 5 per cent. This is very satisfactory as shewing how great is the control that can be exercised over these diseases by vigilant preventive measures with regard to their causation and spread.

Notification of Infectious Diseases.—There were 851 cases of infectious diseases notified to us and dealt with during the year. Our President has arranged with the Telegraph Department for the prompt conveyance of notifications through their office, and this facilitates effective action. The distribution of cases of typhoid fever, diphtheria, and scarlatina throughout the colony is given in Appendix I. to the Report, with the comparative numbers in the five previous years. A plan of Hobart shows the location of each case in the city marked thereupon.

Typhoid Fever.—There were 492 cases of typhoid fever and continued fever notified, and 47 deaths from it registered during the year, as compared with 276 cases with 45 deaths in 1896. The number of cases is greater than in any year since 1889, but the number of deaths was greater in 1891. The disease was generally speaking of a mild type, for the case-rate of mortality

was only 9.6 per cent. as compared with 15.8 per cent. in 1896 and 18.7 per cent. in 1891. This diminution is also greatly due to the more frequent treatment of patients in hospitals. With respect to the incidence of the disease as regards locality, about 36 per cent. of the cases occurred in Hobart and Launceston, and 65 per cent. in the rest of the island; and as regards population the case-rate in the cities was 3.56 per 1000, and in the country 3.06 per 1000. The disease was particularly rife among the mining population. In Beaconsfield, Queenstown, Lefroy, and Zeehan and neighbourhood, the case-rate was over 18 per 1000, as compared with 1.4 per 1000 for the rest of the country districts, and the above mentioned 8.56 per 1000 for the cities. Of the 492 cases notified, 362 were treated in public hospitals. It will be noticed in the table given in the Appendix that 80 cases were notified from Hamilton—a case-rate of probably over 60 per 1000. This is certainly in part due to the inferior quality and insufficient quantity of the water supply derived from the River Clyde.

Diphtheria.—There were 180 cases of diphtheria notified and 19 deaths registered attributed to it, as compared with 114 cases with 13 deaths in 1896. It will be noticed that notwithstanding the greatly increased number of cases, the number of deaths is smaller. During the past four years the death-rate from diphtheria has continuously and rapidly decreased from 19.8 per cent. of cases in 1894, through 16.8 per cent. in 1895, and 11.9 per cent. in 1896, to 8.0 per cent. in 1897. As this decrease in mortality is coincident with the increase in use of anti-toxin serum, we cannot but regard this as the cause and that as the effect. Of the 149 cases, 44 were treated in the public hospitals.

Scarlatina.—There were 308 cases of scarlatina notified, and five deaths registered as caused by it, as compared with 29 cases and no deaths in 1896. The disease was chiefly prevalent on the North-west Coast and the country behind it. We have reason to believe that many more cases occurred than were notified, as in the more sparsely peopled districts behind the larger settlements many cases are never seen by a doctor. The rate of case mortality was therefore probably below the 2.5 per cent. given in the Appendix.

There were no deaths from measles or whooping-cough.

Influenza was prevalent during the year. There were 28 deaths registered as compared with 24 in the preceding year.

Phthisis.—There were 135 deaths registered from phthisis during the year, in comparison with 118 during the preceding year. The death rate from it in each 100,000 living was, in—

Hobart	...	...	...	...	124
Launceston	...	...	...	...	114
Country Districts	...	...	...	...	52

Infant Mortality.—There were registered during the year the deaths of 411 infants under one year of age, being equal to 21.1 per cent. of all the deaths, and 8.6 per cent. of all the births. There were in

Hobart, 116 such deaths, equal to 20.3 per cent. of all deaths, and 13.4 per cent. of all the births.
Launceston, 69 such deaths, equal to 22.6 per cent. of all deaths, and 11.4 per cent. of all the births.

Country Districts, 226 such deaths, equal to 21.2 per cent. of all deaths, and 6.7 per cent. of all the births.

In England and Wales the proportion is usually about 25 per cent. of the deaths and 14 per cent. of the births.

Vaccination Act.—Only 29 children were brought for vaccination during the year, of whom two were not

seen on the eighth day, and, of the rest, 26 were successfully vaccinated, and one unsuccessfully. There were also 52 adult Chinese vaccinated on arrival in the colony.

Amendment of the Vaccination Act.—In accordance with the suggestion made in our report for last year, we have had a bill drafted for amending "The Vaccination Act, 1882," which our president will introduce into Parliament, and for which we ask your hearty support. Though we believe that the only efficient preventive measure against small-pox is universal vaccination, we have modified the compulsory clauses, in accordance with the suggestions made in the report of the recent Royal Commission on Vaccination in England to protect those who honestly believe that vaccination is altogether injurious. To meet the scruples of those who believe that diseases have sometimes been communicated by vaccination from unhealthy to healthy children, we have provided that all parents may demand the use of calf-lymph only; and we have already made arrangements for supplying glycerinated calf-lymph prepared on Worlton's system, as recommended by the best practitioners in Britain, to all who require it.

Quarantine Act.—In connection with the arrival of the s.s. *Nineveh* at Melbourne, from the Cape of Good Hope, with small-pox on board, and the landing of some of the passengers before the existence of the disease was discovered, we had for a few days to put the provisions of the Quarantine Act in force as regards the medical inspection of all ships from Victoria. Happily no ill effects followed, as the passengers were soon traced, and all quarantined at Melbourne.

Barnes Bay Quarantine Station.—As Hobart is the first port of call for two lines of passenger steamers calling at the Cape, where small-pox is virtually endemic, we felt it necessary, after careful inspection made, to call your attention to the state of unpreparedness that we found at the Barnes Bay Quarantine Station, should it be required for use in connection with a similar incident to that of the s.s. *Nineveh* at Melbourne. We again urgently ask that the Barnes Bay Station should be immediately put into and always kept in a condition to meet any emergency. We regard this, not only as a question of self-preservation for Tasmania, but also of intercolonial comity.

Water Supply.—The Board has taken much interest in connection with the water supply of Beaconsfield, Bothwell, Hamilton, Lefroy and Tunbridge, and done what we could to further schemes for improvement. Appended to the report is a tabulated statement showing the number of typhoid, diphtheria and scarlet fever cases reported in the different districts of the local boards for the past six years. Also a spot map showing the location of notified diseases in Hobart.

VITAL STATISTICS.

SYDNEY.—There were 1,043 births and 625 deaths registered in Sydney during July. The principal causes of death were:—Measles, 36; influenza, 17; puerperal fever, 4; diphtheria, 11; typhoid fever, 3; bronchitis, 66; pneumonia, 67; cancer, 33; phthisis, 64; scarlet fever, 4; whooping cough, 2.

MELBOURNE.—The chief causes of death in greater Melbourne during July were as follows:—Measles, 24; diphtheria, 12; cancer, 82; phthisis, 75. There were in all 1,012 births and 630 deaths registered during the month.

ADELAIDE.—The following were the chief causes of death in June:—Enteric fever, 3; cancer, 2; phthisis, 11; scarlet fever, 1.

BALLARAT.—There were 11 deaths from measles, 3 from diphtheria, 1 from typhoid fever, 2 from erysipelas, 5 from phthisis, 5 from bronchitis, and 10 from pneumonia during July.

TASMANIA.—The Government Statistician's report on vital statistics of the colony shows that during the month of July 120 births were registered in the districts of Hobart and Launceston. To every 1,000 of the population of the two districts the proportions of the births registered were as follow:—For Hobart, 1'86; for Launceston, 1'88; all, 1'86. The deaths registered in July in Hobart and Launceston numbered 90. The total number of deaths registered in the two districts during July, 1898, is 24 less than in the corresponding month last year. To every 1,000 of the population of the respective divisions the proportions of deaths registered were as follow:—Hobart, 1'09; Launceston, 1'88; all, 1'40. The deaths under 5 years of age numbered 15, or 16'67 per cent., of which 14 were under 1 year of age.

NEW ZEALAND.—There were 3 deaths from diphtheria, 5 from typhoid fever, 6 from cancer, 36 from phthisis, 10 from bronchitis, 7 from pneumonia during June in the four principal towns in New Zealand, viz., Auckland, Wellington, Christchurch, and Dunedin.

BRISBANE.—The chief causes of death in July were:—Scarlet fever, 6; influenza, 12; whooping cough, 4; diphtheria, 3; cancer, 3; phthisis, 8; pneumonia, 19; Bright's disease, 6.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

LAUNCESTON HOSPITAL BOARD AND AN HONORARY MEDICAL STAFF.—A special meeting of the Board was held on August 12th to consider the amended petition of the Launceston Branch of the British Medical Association which set forth that it was desirable to have a Honorary Medical Staff attached to the hospital in place of a Resident Surgeon Superintendent.

After full discussion the prayer of the petition was not granted. We have been informed that it is now pretty certain that the petitioners will approach Parliament with a view of bringing about the reform they desire.

MEDICAL NOTES.

PRESENTATIONS TO MEDICAL MEN.—Dr. A. Lewers, of Creswick, Vic., has been made the recipient of an illuminated address from the local Medical Union, prior to his departure for England.

Dr. J. H. Champ, of Beaconsfield, Tas., was on August 25th, entertained at a social by the inhabitants of the district, and presented with three addresses and a purse of sovereigns, the occasion being the departure of Dr. Champ on a prolonged health-seeking holiday.

Dr. George E. Rennie, of College Street, Sydney, was on Sept. 6th & 16th, presented with a purse of sovereigns and a beautifully illuminated address by the members of the New South Wales Branch of the British Medical Association, and the Sydney and Suburban Provident Medical Association, of which organisations he has been the valuable and highly esteemed honorary secretary for nearly three years. The occasion of the presentation was the departure of Dr. Rennie, on September 17th, for London, where he intends to take up his residence. *Vide p. 412.*

MEDICO-LEGAL.

KISSING THE BOOK.

TAKING THE OATH.—A peculiar incident took place in the Balmain Police Court, Sydney, some time ago. A woman was about to give evidence, and in going through the customary form of being sworn, held the Bible in her hand, but instead of kissing the Book kissed her thumb. Mr. Isaacs, the magistrate, observed the proceeding and stopped the case at once to inquire why the witness had not observed the rules of the court. Recently, he said, he had noticed another woman do the same thing, and he could come to no other conclusion but that they regarded themselves by this act as not being bound by the solemnity of the oath, and, therefore, free to give evidence of an untruthful character if they thought fit to do so. The witness was then re-sworn and kissed the Book in the manner usually observed.

MEDICO-PARLIAMENTARY.

ANOTHER MEDICAL BILL FOR N.S.W.

THE following is the text of a Bill introduced into the Legislative Council by the Vice-President of the Executive Council (Hon. Andrew Garran, LL.D.):

A bill to regulate the practice of medicine and surgery and other matters connected therewith.

Preamble.

WHEREAS, it is expedient to enable persons requiring medical aid to distinguish qualified from unqualified practitioners. Be it therefore enacted as follows:

I.—Penalty for falsely using the name of a physician, doctor, etc.

- (1) Any person who, not being a legally qualified medical practitioner within the meaning of the Act II. Vic. No. 22, as amended by the Acts IX. Vic. No. 12 and XIX. Vic. No. 17, or entitled to be registered as a legally qualified medical practitioner within the meaning of this Act, takes or uses the name or title of a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, or surgeon, or any name, title, addition, or description implying that he is a legally qualified medical practitioner as aforesaid, shall be liable to a penalty of *fifty* pounds, and in the case of a continuing offence against the provisions of this section to a further penalty of *five* pounds for each day from the time when the said offence was first committed, or shall be liable to imprisonment for a term not exceeding *twelve* months.
- (2) A person shall be deemed to be entitled to be registered as a legally qualified medical practitioner within the meaning of this Act if, in fact, he has fulfilled the conditions and done the things and possesses the qualifications required in the Act II. Vic. No. 22, as amended by the Acts IX. Vic. No. 12 and XIX. Vic. No. 17, in order to entitle him to be registered as aforesaid.

II.—Persons advertising that they treat disease.

- (1) Any person who states in an advertisement or notification that he treats disease, injury, or ailment, or that disease, injury, or ailment is treated in any house therein referred to, shall in every such advertisement or notification as aforesaid, state his christian name and surname in full, and shall place and maintain the said names upon any house (if any) referred to in the said advertisement or notification.

- (2) Any person who fails to comply with the requirements abovementioned or any of them shall be liable to a penalty of *twenty* pounds, and in the case of a continuing offence to a further penalty of *five* pounds for each day from the time when the said offence was first committed.

- (3) Any person purporting to be but not being the person whose name is stated in any advertisement or notification as aforesaid, who treats disease, injury, or ailment at any house referred to in any advertisement or notification as aforesaid shall be liable to a penalty of *twenty* pounds. In any proceedings under this subsection, the burden of proving that he is the person whose name is stated in the advertisement or notification shall lie on the person charged.

III.—Copy of register to be evidence.

A copy of the register kept in pursuance of the Act II. Vic., No. 22, purporting to be signed by the President of the New South Wales Medical Board, shall, in any proceedings under this Act, be *prima facie* evidence that the persons whose names are therein contained and no others were, up to and including the time when the said copy of the register purported to have been so signed, legally qualified medical practitioners as aforesaid.

IV.—Offences and penalties.

All penalties imposed by this Act may be recovered before, and all charges under this Act may be heard and determined by, a stipendiary or police magistrate, or any two justices of the peace in petty sessions.

V.—Short title.

This Act may be cited as the "Medical Practitioners' Act, 1898."

OBITUARY.

HEINRICH LILIE, M.D., Ch.D., O.D. Bonn. 1879, died at Darlinghurst, Sydney, on August 22nd. Dr. Lilie arrived in New South Wales in 1884. He practiced for nine years in Moree, N.S.W., after which he took a trip to Europe. Two years later he returned to the colony, and settled in Sydney, where he had been in practice for the past three years.

HERBERT WILLIAM NIX, M.R.C.S. Eng.; L.R.C.P. Lond. 1890; M.B., B.S. Cantab. 1891. He was found dead in his bed at Marble Bar, W.A., on August 15th, with a bullet wound in the head. A pistol was clasped in his hand. Dr. Nix was Resident Medical Officer at Marble Bar for the past four years.

LITERARY NOTES.

WE have received the second edition of Surgeon-Major E. W. Wilson's *Notes on Malaria*, the first edition of which we reviewed in our columns a short time ago. It has now been enlarged, by the addition of statistics for 1897. It is published by Mr. H. K. Lewis, London, 1s.

An excellent paper on *The State Prevention of Consumption*, by E. Robertson, M.D., which was read before the Auckland Institute in June, 1897, has been reprinted from the transactions of the N.Z. Institute.

We have to acknowledge the receipt of a very interesting pamphlet by Alfred Haviland, M.R.C.S. Eng., containing an address on *Medical Geography as an aid to Clinical Medicine*, and an article on *Phthisis and the Life of Man*, both of which are very readable. The former paper has been reprinted from the *Lancet*, the latter from the *Journal of Bacteriology and Climatology*. Messrs. John Bale, Sons and Danielsson, Ltd. (Lond.) are the publishers.

NAVAL AND MILITARY INTELLIGENCE.

NEW SOUTH WALES.—His Excellency the Governor, with the advice of the Executive Council, has been pleased to approve of the following appointments, promotions and transfer:—*Naval Brigade*: Surgeon Wilfred John Robert Nickson, M.D. Univ. Dub., Ch.B. Univ. Dub., to be Staff-Surgeon; Surgeon John James Steel, L.R.C.P. Edin., L.R.C.S. Edin., M.B. Univ. Melb., to be Staff-Surgeon; Gregory John Lamb O'Neill, M.B. et Mast. Surg. Univ. Edin., gentleman, to be Surgeon. *Reserve of Officers*: Staff-Surgeon Theodore Mailer Kendall, L.R.C.P. Edin., L.R.C.S. Edin., from the Naval Brigade, to be Staff-Surgeon. *Medical Staff Corps*: Surgeon-Lieut. Alfred Edward Perkins to be Surgeon-Captain on the Partially-paid Establishment.

VICTORIAN MILITARY FORCES.—The following promotion has been duly gazetted:—*Head-Quarters Staff*: Brigade-Surgeon Lieutenant-Colonel Gerald Henry Fetherston, M.D., to be Surgeon-Colonel.

TASMANIA.—Surgeon-Major Gutteridge, of the Launceston Rifle Regiment, has been placed upon the retired list with the honorary rank of Surgeon Lieutenant-Colonel.

CHANGE OF ADDRESS, ETC.

ADAM, Dr. B. J., has removed from Ballarat to Daylesford, Vic.

BERMOER, Dr., late of Peru, has started practice at Swansea, Tas., as successor to Dr. W. Jones, who has gone to Adelong, N.S.W.

BROWNE, Dr. D. GRAHAM, late of W. A., has commenced practice at Ballan, Vic.

CHAMP, J. H. Dr., of Beaconsfield, Tas., has gone on an extended tour for his health.

CHESON, Dr. H., late of Taroom, Q., has commenced practice at Bungendore, N.S.W.

CROWTHER, Dr. F. S., late Resident Physician at Alfred Hospital, Melbourne, has started practice at Warracknabeal, Vic.

DIXON, Dr. G. P., late of Albury Hospital, N.S.W., has been appointed Resident Surgeon at the Children's Hospital, Brisbane.

GRAHAM, Dr. E. A., has succeeded to Dr. Leger Erson's practice at Broken Hill, N.S.W.

KENDALL, Dr. H. MARTINDALE, formerly of Hokitika, has returned from England and commenced practice at Wellington, N.Z., as a specialist for diseases of the eye, ear, nose and throat.

KENNY, Dr. F. H., late of Coolgardie, W.A., and formerly of Oakleigh, Vic., has commenced practice at Cairns, Q.

MOORE, Dr. H. O., has removed from Ballan to Beulah, Vic.

ROCKETT, Dr. P. J., has removed from Derby to Gormanston, Tas.

SCOTT, Dr. E. W. K., has commenced practice at Eagle Junction, near Brisbane.

MEDICAL APPOINTMENTS.

The following medical appointments are announced:—

Adam, B. J., M.B., &c., to be Officer of Health for Borough of Daylesford, Vic., *vice* Dr. E. B. Allan, resigned.

Bill, G., M.B. Edin., &c., to be Public Vaccinator at Pyramid Hill, Vic., and Officer of Health for East Loddonshire, East Riding, Vic., *vice* the late Dr. H. G. Kelly.

Gregg, James, M.B., &c., to be Public Vaccinator at Wedgeburn, Vic., *vice* Dr. R. A. A. Namy, resigned.

Lothbridge, C. F., M.R.C.S., &c., to be Public Vaccinator at Beaconsfield, Vic.

MacBinnie, S. M.B., &c., to be Acting Medical Superintendent of the Beachworth Lunatic Asylum during the absence of Dr. H. A. Sampson, on leave.

Martin, Dr. J., to be Health Officer for Broad Arrow, W.A., *vice* Dr. Swing, resigned.

Matthews, J. M., M.B. Univ. N.Z., &c., to be a Public Vaccinator for District of Popotuna, N.Z.

Moore, H. O., M.B., &c., to be Officer of Health for Murrumbidgee (southern portion) and Public Vaccinator at Beulah, Vic., *vice* Dr. F. Cheetham, left the district.

Mulles, W. L., M.D., &c., to be Acting Medical Superintendent of the Sunbury Lunatic Asylum, during the absence of Dr. J. A. O'Brien, on leave.

Reid, M.A., M.B., &c., to be Public Vaccinator at Kerang, Vic., *vice* Dr. T. M. Austin, resigned.

Roberts, L. W., M.R.C.S., &c., to be Public Vaccinator at Walhalla, Vic., *vice* Dr. J. Stewart, resigned.

Seed, Dr. W. F., to be Resident Medical Officer and Public Vaccinator for Coolgardie, W.A., *vice* Dr. A. McNeill.

Waldes, F. James, M.B., C.M. Edin., L.M. Beckwith Hosp., Dub., has been appointed Medical Officer to the Sorrell District, Tas., at a guaranteed salary of £250 per annum by the Medical Committee.

Walker, E. A., M.B., &c., to be a Public Vaccinator for New Plymouth District, N.Z.

DONATIONS TO MEDICO-CHARITABLE INSTITUTIONS IN TASMANIA.

THE GUESDON LEGACIES: A MUNIFICENT BEQUEST.

In the Tasmanian House of Assembly, on June 19th, the Premier (Sir Edward Braddon) gave the following information in regard to the distribution of the Guesdon charitable bequest:—

The amount was £26,732 6s. 2d. in new consols, and £1,750, or thereabouts, in cash, and it was to be divided as follows:—Boys' Home, Hobart, £2,500; Girls' Industrial School, Hobart, £2,500; Convalescent Home, Hobart, £2,500; House of Mercy, Hobart, £1,500; Hospital for Women, Launceston, £5,000; Girls' Industrial School, Launceston, £2,500; District Nursing Association, Launceston, £1,500; Evangelical Nursing Association, Launceston, £1,000; Cottage Hospitals Zeehan, Strahan, Waratah, Beaconsfield, Devon, Campbell Town, and Queenstown, £7,000. Added by Mr. Justice Romer, Girls' Training School Reformatory, Hobart, £1,000; Benevolent Society, Hobart, £750; Ragged Schools Association, Hobart, £500; Benevolent Society, Launceston, £750; Total, £29,000. (Applause.) Any residue was to be divided between the Boys' Home and Girls' Industrial School, Hobart, and the Girls' Industrial School, Launceston. In each case the amount appropriated, unless and until required in expenditure in buildings or improvements of a permanent character, should be invested upon such securities as allowed by law for investments of trust funds, and the income only applied as it might accrue from time to time in or towards the ordinary current expenses of maintenance of the institution. (Cheers).

LAUNCESTON HOSPITAL.—Mrs Barnes has presented the Hospital Board with a cheque for £150, with the request that it be placed in Savings Bank, and that the income from it be devoted at the end of March in each year to provide a "William Barnes" prize for the nurse who had during the past 12 months gained highest number of marks in final examination for a certificate as a trained nurse.

REVIEWS.

(Continued from page 407.)

LECTURES ON THE ACTION OF MEDICINES: Being the Course of Lectures on Pharmacology and Therapeutics delivered at St. Bartholomew's Hospital during the summer session of 1896. By T. Lauder Brunton, M.D., D.Sc. Edin., LL.D. (Hon.) Aberd., F.R.S., F.R.C.P.; Physician and Lecturer in Pharmacology and Therapeutics to St. Bartholomew's Hospital. London: Macmillan & Co. Sydney: Angus & Robertson, 1897. Price, 18s.

These lectures are intended to give a general sketch of the mode in which drugs act upon the body. They are not intended for the purpose of cramming, nor do they supply the student with all the information he needs, but they awaken his attention, excite his interest, and impress upon him certain points which will form a nucleus for his knowledge, and around which he may afterwards group more information.

The author's easy style is well shown in this volume, which is interesting even to the senior practitioner who wishes to keep himself abreast of the times. Illustrations help us to understand the text. The book should be largely read.

ATLAS OF METHODS OF CLINICAL INVESTIGATION, WITH AN EPILOGUE OF CLINICAL DIAGNOSIS, AND OF SPECIAL PATHOLOGY AND TREATMENT OF INTERNAL DISEASES. By Dr. Christof Jakob, formerly First Assistant in the Medical Clinic at Erlangen. Authorised translation from the German. Edited by Augustus A. Lehner, M.D., Professor of Clinical Medicine in the Philadelphia Polyclinic, Physician to the Philadelphia Hospital, etc. Philadelphia: W. B. Saunders. Sydney: L. Bruck, 1898.

This handy atlas of clinical medicine consists of 182 coloured illustrations upon 68 plates and some 250 pages of reading matter with 64 illustrations. The beauty, clearness and accuracy of the illustrations make the volume a practical one.

Part I. deals with clinical microscopy and chemical colour reactions. The blood in health and disease, the sputum, the contents of the intestinal tract, the urine and its sediments, etc., are well done.

The second part contains plates showing the normal projection of the viscera, and diagrammatic representations of abdominal and chest diseases.

The remainder of the work is devoted to the examination of the patient, and the diagnosis of the various diseases.

Such a book as this is invaluable to all physicians who wish to be up to date, and we heartily recommend it to the profession in Australia.

A MANUAL OF SURGERY FOR STUDENTS AND PRACTITIONERS. By William Rose, M.B. B.S. Lond., F.R.C.S.; Professor of Clinical Surgery in King's College, and Senior Surgeon to King's College Hospital; and Albert Carless, M.S. Lond., F.R.C.S., Senior Assistant Surgeon to King's College Hospital. London: Baillière, Tindall and Cox. Sydney: L. Bruck, 1898. Price, 24s.

In preparing this manual of surgery for the profession, the authors have met a genuine need. The ordinary text-books and works of reference, valuable as they are in their way, are too large for the requirements of the ordinary student. It has been, therefore, the aim to present the facts of surgical science in a

concise and succinct form, so as to satisfy the needs of students, even of those who are preparing for the higher examinations. At the same time, the requirements of the general practitioner have not been overlooked, for care has been taken to discuss in detail those conditions which are most likely to be met with in ordinary practice.

The authors have succeeded in producing an eminently practical work on modern surgery. Surgery in all its branches is dealt with by master hands, and 392 excellent illustrations help to elucidate the text. The volume is dedicated to Lord Lister, "the Father of Antiseptic Surgery." There are few who will not derive great benefit from a close study of this valuable manual.

AT DAWN AND DUSK. By Victor J. Daley. Sydney: Angus and Robertson, 1898. Price, 7s.

This is a volume of excellent verses which were, for the most part, published in the *Sydney Bulletin*, others appeared in the *Sydney Mail*, *Freeman's Journal*, *Table Talk*, and *Melbourne Punch*.

Victor Daley has come to be recognised as one of the foremost of Australian poets.

"I have been dreaming all a summer day

Of rare and dainty poems I would write;

Love Lyrics delicate as lilac-scent,

Soft idylls woven of wind, and flower and stream,

And songs and sonnets carved in fine gold."

This is the opening stanza of the book, and when we read through the volume we recognise that the dream has been fulfilled.

Few of the verses are peculiarly Australian in sentiment, but the lofty ideas, and the elegant expressions do not suffer by this. Daley's merits as a poet will now be fittingly recognised.

Messrs. Angus and Robertson are to be congratulated on the general appearance and finish of the volume.

LA GRIPPE. By Dr. L. Galliard, Physician to St. Antoine Hospital. Paris: Baillière, 1898.

This is an exhaustive description of influenza, written with French terseness and lucidity. Diverse opinions are marshalled and compared, illustrative cases cited, and authorities freely quoted. The clinical varieties of La Grippe are divided into the *Common*, *Nervous*, *Cerebral Bulbar or Medullary*, *Gastro-intestinal*, and *Thoracic*. These are expounded, together with its course when complicated with acute and chronic diseases. Of common influenza, the incubation period is variously estimated at twenty-four hours up to eight days. The duration of its course is stated at from 24 hours to 15 days.

The author adopts Dr. Faisan's classic description of the "influenza tongue," whose surface (which may also be furrowed as a result of some complication) presents a peculiar opaline or porcelain tint like bluish-white enamel, uniform or in patches, unmodifiable by drugs or by friction. This appears during the first two or three days, lasts as long as the disease, and may persist after apparent convalescence, indicating possibility of a relapse.

From among signs of the disease, urinary and splenic affections are dismissed as not proven, but the occasional occurrence of scarlatiniform or morbilliform eruption as well as of papular erythema, is admitted. Among more than 1,000 cases, we have ourselves seen two scarlatiniform eruptions lasting from 24 to 86 hours which were followed by desquamation.

Dr. Galliard states that Quinine, promptly administered, has succeeded in aborting mild attacks but has no influence upon severe cases. During the course of

the disease he gives Quinine as antipyretic, Phenazone or Phenacetin as analgesics, Ol. Ricin. or Sod. Sulph. for gastro-enteritis, Tolu or Terebene with antispasmodics for respiratory trouble, Pot. Brom. with cataplasms or revulsives for fretful cough, milk diet with hot drinks and alkaline waters to promote diuresis, extra care and stimulants during convalescence.

It stands to reason that the course of the disease must be somewhat modified by climate. We estimate from Australasian experience, that in 90 per cent. of uncomplicated cases the patient is able to resume his or her usual avocations on or before the eighth day from commencement of treatment.

Pfeiffer's bacillus is recognised as the specific microbe found in the bronchial muco-pus. Effects and complications due to the presence of other bacilli and cocci are discussed.

Dr. Galliard brands influenza as "epidemic, pandemic, endemic, and contagious." He maintains that the patient can transmit it before advent of the catarrh, and continue to do so during convalescence; that it flourishes independent of season, and that individual predispositions are nearly equal. With this last assertion our observations do not coincide.

He says that its degree of severity depends upon the virulence of the bacillus, that it may be perverted by the predominance of a syndrome or of a diathesis and complicated by intervention of other microbes or by concomitant accident, that it finds out any weak point, *locus minoris resistentiae*, and when it kills it is because it strikes in the thorax.

In conclusion, he recommends isolation of the patient, disinfection of the respiratory secretions as well as of linen, clothing and all objects which may become vehicles of contagion; but, in point of fact, demonstrates that prophylaxis is impossible.

MANUAL OF OPERATIVE SURGERY. By H. J. Waring, M.S., M.B., B. Sc. (Lond.), F.R.C.S., Demonstrator of Operative Surgery and Surgical Registrar, Late Senior Demonstrator of Anatomy St. Bartholomew's Hospital, Surgeon-in-Charge of the Throat and Ear Department Metropolitan Hospital, Surgeon to the Metropolitan Hospital, Surgeon to the Belgrave Hospital for Children; and Erasmus Wilson, Lecturer to the Royal College of Surgeons, England. Crown 8vo., p.p. 661; 420 illustrations. Edinburgh: Young J. Pentland. Sydney: Angus and Robertson, 1898.

"Written with the object of serving as a text-book for the classes held in the Operative Surgery Department of St. Bartholomew's Hospital," and enlarged "to make it a complete hand-book for the use of students," this book fills a distinct gap in surgical literature.

No attempt is made, as in many of the larger treatises, to describe every operation that is, or has been, performed in any given case; under each heading, only what appear to the author to be the most important methods are discussed. Thus, under Radical Cure of Hernia, only the methods of Bassini, Kocher, and Macewen are described, and under excision of the tongue those of Whitehead and Kocher.

In every case the operation is fully and clearly described, and—an important feature of the book—the indications for operative treatment are given, together with an outline of after treatment.

Of course, in treating in a comparatively small space of so large a subject as operative surgery in 1898, the excellence of different chapters varies. Thus while the sections on amputations and excisions are most excellent, and that on the surgery of the liver is perhaps the best summary we have on that rapidly-advancing

branch of abdominal surgery, some might complain that descriptions of such minor operations as plugging the posterior nares and incision of the tonsillar abscess could well give place to further expansion on the treatment of strangulated hernia, and other important operations.

As a whole the book is a most excellent one, and can be confidently recommended to both students and practitioners who desire a concise yet complete guide in up-to-date surgery. The illustrations are numerous and good.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW ZEALAND.

Upham, Charles Hazlett, M.R.O.S. Eng. 1885, L.R.O.P. Lond. 1886.
Thacker, Henry M.B., Ch.M. Univ. Edin. 1896, F.R.C.S.I. 1898.
Pugh, John Hopkins, L.S.A. Lond. 1874, M.R.O.S. Eng. 1877.

QUEENSLAND.

Dixon, Graham Patrick, M.B., Ch.M. 1897, Univ. Sydney.
Kenny, Fredk. Hamilton, Lic. Soc. Apoth. Lond. 1881, Mem. R. Coll. Surg. Eng. 1882.

Scott, Ernest Walter Kerr, M.B., Mast. Surg. 1895, Univ. Edin.

Re-qualified.

Stookwell, James, Lic. R. Coll. Phys. Edin. 1868, Lic. R. Coll. Surg. Edin. 1868. (Registered in Q. 5th November, 1896.)

Long, Mark Henry, Lic., Lic. Midwif. 1883, E. Q. Coll. Phys. Ire., M.D. 1883, Univ. New York. (Registered in Q. 3rd January, 1894.)

Sheaf, Charles Alfred Ernest, Lic. 1871, Mem. 1874, R. Coll. Phys. Edin.; Lic. 1871, Fell. 1876, R. Coll. Surg. Edin. (Registered in Q. 3rd January, 1884.)

Kealy, Joseph Patrick, Lic., Lic. Midwif. 1880, K. Q. Coll. Phys. Ire.; Lic. R. Coll. Surg. Ire. 1880. (Registered in Q. 4th August, 1897.)

Correction.

O'Brien, Daniel Patrick, Fell. R. Coll. Surg. Ire. 1897, Lic. R. Coll. Phys. Ire. 1895, Lic. R. Coll. Surg. Ire. 1895.

Additional Qualification.

Halford, Arthur Charles Frederick, M.D. 1898, Univ. Melbourne.

VICTORIA.

Browne, David Graham, M.D. & Ch.M.R. Univ. Ire. 1871.
Haydon, Leonard Gussoote, M.B. & Ch.M. 1896, D.P.H. 1897, Aberd.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

COWEN.—On the 15th August, at Drouin, Vic., the wife of Dr. A. Cowen of a daughter.

FRIZELL.—On the 3rd August, at Tyrone, Strathfield, N.S.W., the wife of T. Frizell, M.D., Ch.M., of a son.

MURDOCH.—On the 7th August, at Marroo, Romsey, Vic., the wife of D. Murdoch, M.B., Ch.B., of a son.

RUTLEDGE.—On the 22nd August, at the Rectory, Mittagong, N.S.W., the wife of the Rev. D. D. Rutledge, M.A., M.B., Ch.M., of a daughter.

MARRIAGES.

GLEESON—MADDEN.—On the 24th August, at St. Patrick's Cathedral, Melbourne, by the Very Rev. Dean McKenna, P.F. Gleeson, M.B., son of Edmond Gleeson, of Fitzroy, to Isa Marion, daughter of W. J. Gilchrist, barrister-at-law.

PEEBLES—NEAL.—On the 26th July, at St. Paul's Church, Bendigo, Vic., by the Rev. Archdeacon MacCullagh, Frank M. Peebles, M.B. & B.S., son of J. H. Peebles, Geelong, to Sine E., only daughter of late W. P. Neal, Bendigo.

ROBERTSON—HUTCHISON.—On the 13th August, at St. Stephen's Presbyterian Church, Maryborough, Q., by the Rev. Dr. Knipe, Wilhelmina Fannie Hutchison, second daughter of W. F. Hutchison, Glasgow, N.B., to John Crawford Robertson, M.D., third son of James Robertson, Maryborough, Queensland.

DEATHS.

FRIZELL.—On the 14th August, at Tyrone, Strathfield, N.S.W., the infant son of T. and A. Frizell.

LILIE.—On the 22nd August, 1898, at his late residence, Los Angeles, Victoria-street N., Darlinghurst, Sydney, Heinrich Lilie, M.D.

MASON.—At Coromandel, New Zealand, Mary, the dearly beloved wife of Dr. William Mason, late of St. Kilda, also Box Hill, aged 57.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

ALBUMINURIA FROM A LIFE ASSURANCE POINT OF VIEW.

By J. W. SPRINGTHORPE, M.D. MELBOURNE.

MEMBERS will no doubt have noticed with approbation that, at the recent annual meeting of the Association, the great subject of life assurance, so important to both public and profession, received official sanction and sectional position. And as chief medical officer to a large society, I may be permitted to introduce what I trust may prove the first of a series of papers and discussions upon life assurance matters, with a view to the crystallisation of our knowledge, and the standardization of our practice.

There are many matters of Australian, as well as scientific interest, that await such treatment; but, at the short notice at my disposal, I have selected albuminuria, because it is second to no other in importance, and has local as well as general claims upon our consideration.

1. *The Significance of Albuminuria.*—The urinary excretion is partly a mechanical matter of filtration through an animal membrane under varying degrees of pressure, and partly a vital matter of the selective removal of irritant matters by the renal cells. Urinalysis, which is probably the best single guide to the state of the health is, however, concerned with much more than the presence or absence of certain recognised pathological products, such as albumin and sugar; to be reliable, it should include investigations of amount, specific gravity, chemical reaction, and composition and microscopic appearances.

(a) Thus albuminuria alone is no test of what is happening to the nitrogenous matters, those most important constituents of metabolism. The urea, urates, uric acid, etc., may be present in excess and seriously damaging in their effects without any albumin appearing in the urine, and the danger to health therefrom may be greater than that of an easily recognised albuminuria. It is, indeed, especially after mid-life, to the estimation of urea, rather than the discovery of albumin, that we must go for corroborative evidence of the capacity of the kidney to deal with the nitrogenous output; and by this test, almost as simple and rapid as that for sugar or albumin, to help the settlement of the larger question of systemic injury by nitrogenous irritants.

(b) Considerable confusion and even misunderstanding exists also as to what constitutes "albumin." As Smith points out (Hare's "System of Therapeutics," vol. iii, 565) albuminoid matter in different stages of elaboration is constantly finding its way into the urine of multitudes of healthy people, and can be nearly always precipitated by agitation with ether or chloroform, though only exceptionally with heat and nitric acid. Chemists, indeed, seem unable to fix upon a definite formula for albumin, and a fair conclusion is that "there is no body of definite composition to which that name can be solely attached, but rather we have to deal with a transition substance, changing by insensible gradations," and that "every given specimen is simply a mixture of various gradations, some of which respond to one test, some to another." And, in actual practice, even with our present incomplete tests, we meet with a great variety of forms, with very different significations:—

1. There are the serum albumin and serum globulin from the blood—the basis of what we usually regard as pathological albuminuria.
2. There are, also from the blood, the albumoses, globuloses, vitelloses, caseoses, and myosenoses, the intermediate products of the hydration of proteids, diffusible through animal membranes, and connected with faulty assimilation or faulty tissue change.
3. There are the specific toxins of diphtheria, influenza, pneumonia and the like.
4. There are, finally, the contaminations below the kidney proper—the mucin from the genito-urinary passages, the testicular and prostatic secretions, leucorrhœa, etc., of little importance, perhaps, to the general health, but often present, and seldom sufficiently guarded against in our urinalysis.

(c) Even assuming that by a combination of care and skill, we have eliminated the last three subdivisions, there still remains the fundamental question as to the actual pathological condition. Here we are met with at least three considerations:—

1. Increase in blood tension may force albuminoid molecules through the kidney filter, just as in experiments outside the body.
2. Changes in the bloodstream may temporarily damage the filtering or secreting

surface so that serum and other albumins may pass through, or they may add to or alter the circulating albumin so that albumin appears in the urine. The extent and frequency of these causes are but too little recognised, and constitute one of the great defects in the present system of examination. To them alone, or in conjunction, is owing the albuminuria of pregnancy, abdominal tumours, heart disease, oxaluria, lithiasis, anæmia, certain foods, drugs and poisons, excessive exercise, certain postures, nerve strains, and the so-called "cyclic" or intermittent forms.

3. Disease of the kidney itself may be the cause of the albuminuria. Here again considerable misunderstanding still exists, at any rate amongst the lay members of many directing boards. Albuminuria is not, as was once supposed, a necessary part of kidney disease. It generally means damage of the secretory membrane. This may be of very varied extent and continue for long periods without increase, and the most insidious and serious of all kidney diseases—granular kidney—may present little or no albuminuria. Finally, as appears from 1 and 2, albumin may be present in the urine, whilst the kidney itself is healthy.

2. *The Test for Albuminuria.*—For the practical recognition of albuminuria we are still dependent upon the efficiency of our test. At the outset we must remember, as Smith well says, that "if the presence of substances coagulable by other agents is physiological (and such appears from his results), it is hard to believe that the presence of anything that is coagulated by heat and acid is *for that reason* evidence of disease. This would be to establish a chemical rather than a vital standard and classify according to behaviour in a test tube, and not according to relations in the economy." The usual custom of drawing the line at coagulation is thus arbitrary and unnatural. It may, and often does ignore questions of acidity and alkalinity, of other albuminoid matters, and the very variable duration of cases of persistent and even extreme "albuminuria" on this basis, should constantly remind us of the limitations of our test. Still we are practically driven to some such procedure, safeguarded as well as possible by experience and general considerations.

1. The commonest test is that of heat and nitric acid. But careful investigation shows that it has several serious drawbacks. Thus, it precipitates also the mucin, and pine acids. The latter precipitate is readily soluble in alcohol, but it is difficult if not impossible to eliminate the former. Hence a frequent source of error creeps in. In addition, when the amount of albumin is small and the acid in excess, syntonin is formed, a soluble acid albumin, not precipitated by boiling; whilst where the phosphates are in excess and the acid deficient, a soluble alkali albuminate may be formed, also not precipitated by boiling.
2. Heller's nitric acid in the cold is also largely relied upon. Here again several errors are possible. Where the amount of albumin is very small, it may require half an hour to bring it to light. In concentrated urines, amorphous urates may be precipitated, and confounded with albumin, even though the cloud is within the urine, and disappears with heat. With pine acids, again, a light cloud is thrown down, soluble, of course, in alcohol, and with mucin in excess, we may have a cloud at times indistinguishable from that of albumin.
3. To remedy these defects, a number of other substances have been tried. They include picric acid, sodium tungstate, acidulated brine, nitric magnesium phenic acetic acid, trichloroacetic acid, acetic acid and sodium sulphate, metaphosphoric acid, the Biuret test, Heynsius' test, the Millon reaction, and the anthoproteic reaction. Purdy's summary, in his "Practical Urinalysis" (the best work with which I am acquainted) expresses the general consensus of opinion that all these tests, delicate as they are, are for practical purposes untrustworthy and misleading.
4. One of the main aims of this paper is to advocate a general trial of the test which he recommended for the past 15 years as the most ready and trustworthy of all, i.e., the acetic acid, and potassium ferrocyanide test. Its application is easy, and does not require any spirit-lamp. Pour 15 drops of acetic acid into a clean test tube,

add a drachm of 5 per cent. ferrocyanide solution; thoroughly mix by shaking, then add urine to two-thirds of the test tube, and invert three or four times over the thumb. If albumin, acid or alkaline be present, it is precipitated within two minutes throughout the entire volume as a flocculent cloud. The precipitate is nothing but albumin. There is no reaction with mucin, phosphates, peptones, vegetable alkaloids, or pine acids; but at times, though after the lapse of some time, easily recognised urates may be thrown down. Purdy states that of late years an increasing preference has been given this test in hospitals and laboratories. Personally, I have used it now for some two years in hospital and in private, and cannot speak too highly of it. I believe that Dr. Mollison in an hospital urinalysis and M. de Bavay in laboratory investigations have had a similar experience.

5. For differential information, or to absolutely negative any suspicion of albumin, Purdy recommends, and apparently with justice, the extremely sensitive potassio-mercuric iodide test, which, however, for ordinary purposes, has the disadvantage of responding also to peptones, proteoses, pine acids, and mucin.

3. Practical Conclusions: The conclusions that are to be drawn from the foregoing statement of the case are largely self-evident:—

1. The true significance of albuminuria is not that it is a guide or measure of the pathological metabolism of nitrogenous matters, or a necessary index of kidney disease, but that it is the variable product of a variety of causes, the exact nature, extent and gravity of which must be estimated from other conditions.
2. For the accurate identification of small quantities of albumin we should discard the present nitric acid and heat and nitric acid tests in favour of the acetic acid and potassium ferrocyanide.
3. When such testing has disclosed the presence of albumin in a given sample of urine, we should remember its possible connection with genito-urinary contamination, transient or permanent increase in blood tension, changes

generally transitory, in the composition of the blood, defects in digestion and tissue change, the excretion of drugs and poisons, as well as disease in the kidneys, which, again, may be either transient or permanent.

4. In assessing the value of albuminuria, more than one examination of the urine is thus generally necessary, and regard must be had to all the conditions involved in the foregoing causation, as well as corroboration, in some cases, by the estimation of urea, microscopic examination, and further examination of blood-vessels, heart, and system generally. Thus, in the young, albuminuria is frequently present without kidney disease, it is intermittent, there are no casts, the quantity of urea remains normal, and the prognosis is more favourable. At or about middle age, however, there is the double danger of overlooking a small amount of albumin, due to permanent and progressive kidney disease, and of regarding the kidneys as healthy because no albumin can be discovered. The presence of true albuminuria is thus then of more serious portent, whilst its absence may be more than counterbalanced by the low specific gravity, the deficiency in urea, the presence of casts, and the damage to the cardio-vascular system as shown by increased tension of the pulse, corded arteries, hypertrophied heart, and accentuated aortic sound.
5. In dealing with cases of albuminuria from the life assurance point of view, we are face to face with a complex problem. It is easy to go to either extreme, and treat lightly, or reject almost indiscriminately. In my opinion the cases require special treatment. By two or three special examinations the exact condition of matters should be as far as possible ascertained. It would be well even if a special form were gone through, and, where practicable or advisable, expert urinalysis insisted upon. Then, with this full view of the case before him, the chief medical referee might frequently and fairly take the responsibility of recommending the acceptance of such lives with some appropriate loading, and subject to re-examination at specified intervals.

DISINFECTION OF DWELLINGS IN NOTIFIABLE INFECTIOUS DISEASES.

By W. G. ARMSTRONG, B.A., M.B., CH. M.,
D.P.H. CAMB., SYDNEY.

It was with a considerable degree of diffidence that I accepted the invitation of the hon. secs. to this section to read a paper on the disinfection of dwellings in notifiable infectious diseases, more particularly as I cannot pretend to have anything new or original to offer you on the subject. Indeed, all I can attempt to do is to gather together and put before you in a concise form some facts which have been elicited and conclusions which have been formulated on the subject by different observers. It seemed to me, nevertheless, that I should not be wasting your time by inflicting such a paper on you if my doing so should lead to the subject being thrashed out and some unanimity of procedure being arrived at in this matter. At present it appears that very little regard is paid to the proper disinfection of infected dwellings in this colony. There are few subjects of importance, about which there is so much misapprehension in the public mind as disinfection. Even among the very intelligent section of one's patients one is often startled with the ignorance and confusion of thought one encounters when the most simple measure of disinfection is spoken of. A saucer of weak carbolic solution under the bed, a towel wrung out of weaker Condy's fluid on the towel-rail, and a sprinkling of eucalyptus, probably represent pretty accurately the public's idea of disinfection as applied to the sick room.

Perhaps we should first look for a moment at the conditions in which disinfection is expected by law. After providing for the immediate notification of infectious diseases, among which for our present purposes are included scarlatina, diphtheria, and typhoid fever, the Public Health Act in Sec. 24 goes on to provide that, "where a legally qualified medical practitioner reports, . . . or the local authority is of opinion that the cleansing or disinfection of any premises . . . would tend to prevent or check the spread of any infectious disease, the mayor may serve a notice on the occupier or owner that the local authority will disinfect unless the occupier agrees, within 24 hours, himself to do so to the satisfaction of a medical man." If the occupier does not undertake disinfection, or having undertaken it, neglects to perform, the local authority steps in and disinfects under the supervision of a medical man.

By section 26 it is incumbent on any person ceasing to occupy a tenement within six weeks

of the prevalence of infectious disease to have the house disinfected and to obtain a certificate from a medical man that the disinfection has been duly and satisfactorily carried out.

Again, by section 28 it becomes an offence to send a child to school within two months after suffering from infectious disease, or within six weeks after being resident in a house where such disease has existed, without a medical certificate that he is free from infection and that his clothes have been properly disinfected.

In all these cases the law imperatively demands a medical certificate as a proof that disinfection has been efficiently performed, and by implication it would appear that the only proof of disinfection that can be admitted by law is a medical certificate. It follows that some uniformity of method, some consensus of opinion among medical men as to how disinfection is to be carried out is urgently required. Otherwise this important provision of the law of public health tends to become of no effect; and to carry out the spirit of the law and efficiently check the spread of infectious disease, it is important that disinfection as thorough as is possible under the circumstances should be as far as possible insisted on in every house where a case of infectious disease has occurred. If any evidence as to the value of disinfection in checking the spread of such diseases be required at the present day, I might quote the report of the Paris Bureau of Disinfection for 1897. From this report it appears that in seven years the Bureau has carried out over 171,000 disinfections. In 1886, before the Bureau was organised, nearly 6000 persons died in Paris of epidemic disease. In 1896 the number had fallen to below 2000. That is to say, between 3000 and 4000 lives are saved every year to the community. *En passant*, I might mention that the report concludes with the recommendation that measles, which is to-day one of the most fatal zymotics should be made a compulsorily notifiable disease.

Three classes of agents may be enumerated in this connection—disinfectants, antiseptics, and deodorants. The term disinfectant is now by general consent limited to those agents which actually destroy specific poisons—which, in fact, kill the micro-organisms out of hand. Antiseptics are agents which suspend vitality and the power of propagation of micro-organisms, so preventing decomposition. Deodorants oxidise the products of decomposition, and thereby merely correct offensive odours. There appears to be some real value in this classification, for although in many cases the question of classing a reagent under one or other of

these heads is merely a question of strength or quantity of the reagent employed, there are nevertheless many substances which no amount of concentration will raise above the lowest class, and others which can only attain to the dignity of the second.

It is only with members of the first-class that we are at present concerned. By disinfection, thus I take it, we mean the absolute destruction or removal from the house disinfected of the particulate infecting virus—of the micro-organism, in short, that has caused and may reproduce the disease for which we are disinfecting. And here we perceive at once that there is a difference between, on the one hand, the disinfection that is necessary in dealing with a disease like enteric fever—where our experience leads us to believe the infecting virus is confined to the excreta of the patient, with little tendency to aerial diffusion—and, on the other, that required for the destruction of scarlatina and diphtheritic virus. I shall not dwell on this difference to-night, but confine myself to dealing with disinfection as it should be performed in such conditions as are present when one of the more virulently infectious diseases, of which scarlatina and diphtheria are types, has to be dealt with, acting on the principle that the greater includes the less, and that measures sufficient to disinfect dwellings after scarlatina will at least be sufficient in cases of typhoid.

The absolutely reliable disinfecting agents at present known are few in number. Moist heat is *facile princeps*, but, for obvious reasons, as a disinfectant of dwellings, its application is limited. Besides moist heat, Koch found in a series of experiments that the only chemical solutions which could destroy the spores of anthrax within 24 hours are solutions of the halogens (mercuric chloride 1 per cent., pot. permang. 5 per cent., osmic acid 1 per cent. and carbolic acid 5 per cent.) Gases or vapours had little or no effect on such spores. On the other hand, we are not dealing with anthrax spores, but with very much less resistant organisms. To the best of our knowledge the micro-organisms of typhoid, diphtheria, and scarlatina are sporeless, and practical experience has fortunately shown that disinfection of exposed surfaces in these diseases may be safely and effectually carried out by the aid of several gases when present in sufficient strength.

The most efficient vapours known are probably those of the halogens, but to the routine use of these there are serious practical objections. Bromine and iodine vapours are both reliable disinfectants, the penetrating power of

the former in particular being very good ;* but the high specific gravity of these vapours renders their diffusion unsatisfactory. Moreover, the expense attending their employment is prohibitive. Fischer and Proskauer found that chlorine was the best of gaseous disinfectants, and that in air of moderate humidity 1 per cent. of chlorine killed all micro-organisms within 24 hours, while if the air was completely saturated with moisture, 3 per cent. was sufficient to disinfect in eight hours. To produce 3 per cent. by volume, about 5 lbs. of chloride of lime and $7\frac{1}{2}$ lbs. of hydrochloric acid are required for every 1000 cubic feet of air, quantities which place this method outside the realm of practical politics for routine disinfection. Koch considered that even a larger quantity, viz. : 15 lbs. of bleaching powder and 22 lbs. of hydrochloric acid were necessary for every 1000 cubic feet of air. The French and German sanitary authorities have given up the use of gaseous disinfectants officially. The process most used in France is the spraying of a solution of perchloride of mercury, 1 in 1000, on walls, ceilings, and other surfaces to be disinfected, by means of an apparatus known as the *equifex* spray. Most observers bear witness to the satisfactory results of this method, but Laveran considers it unreliable, and states that bacilli escape destruction by this method even when the spray is produced at a distance of four centimetres. The German authorities rub down the whole surface of the walls and woodwork with bread, sweep up and incinerate the crumbs, and afterwards sprinkle with a carbolic solution. Both these methods possess the drawbacks of being dependent for their efficacy upon the thoroughness and conscientiousness of the operation, as every square-inch of surface must be faithfully gone over. They are also tedious and laborious, and the French method has the further disadvantage that if the wall-paper is not to be removed, the spraying is apt to cause the colours to run and spoil the paper.

Formic aldehyde or formalin vapour is probably one of the most efficient of gaseous disinfectants. Its aqueous solution was first discovered to possess antiseptic properties in 1886, and Trillatt, in 1888, actually found that it was superior to perchloride of mercury in this respect. Slater and Rideal obtained results with the aqueous solution which would place formaldehyde among the first three or four antiseptics in Koch's tables, and found a one per cent. solution killed *B. anthracis* in 15 minutes, *B. coli. communis* and *B. typhosus* in under 50 minutes.

Chemically, formic aldehyde is methylated alcohol deprived of two atoms of hydrogen, and its vapour may be prepared in three ways—(1) By the combustion of methylated spirit in a special lamp, admitting a regulated quantity of air; (2) by heating a mixture of formaldehyde solution and calcium chloride under a pressure of about four atmospheres in Trillat's autoclave; (3) by the volatilisation of tablets of a solid polymerised form of formaldehyde known as paraform in a simple form of lamp, called by the introducers the Alformant. The best results have been obtained from the Trillat autoclave, but the simplest and cheapest method of production is from the paraform tablets. Ten of these tablets, which weigh about one gramme each, will disinfect a room of 1000 cubic feet, at a cost of something under one shilling.

In 1896 Messrs. Roux and Trillat published a paper in the *Annales de l'Institut Pasteur* giving an account of a series of experiments conducted by them in the disinfection of rooms of various sizes by formaldehyde gas evolved by the aid of the Trillat autoclave. The vapour was used dry, and the cubic contents of the rooms dealt with varied from 2000 to about 10,000 cubic feet. After eight hours' exposure squares of linen inoculated with bacillus anthracis, bacillus pyocyaneus, and *B. prodigiosus*, and placed at varying heights in the rooms, were all sterilised when freely exposed to the vapour. In protected situations, as inside the lining of a waistcoat, and the interior of a mattress, the organisms remained unaffected. The analysis of the air of the rooms before and after fumigation also yielded good results. In one experiment, air that before fumigation yielded 520 bacteria and 240 moulds per 500 litres gave no cultures after the experiment.

Dr. Bosc, of Montpellier, had equally good results with formalin. He found that in a series of experiments conducted on a large scale in rooms under the conditions of ordinary practice, that the only micro-organism which resisted the vapours was *B. subtilis*, and that sterilisation was complete in all parts of the room.

At the Leeds Sanitary Conference, in 1897, Dr. Henry Kenwood, Assistant Professor of Public Health at University College, read a paper detailing a series of experiments conducted by himself and Mr. H. J. Curtis on the use of formaldehyde vapour in disinfecting rooms. Formalin was produced in these experiments in each of the three different methods referred to previously, and the conclusions

arrived at were as follows:—(1) That when the atmosphere is charged with less than 1 per cent. of the vapour, the disinfection of all surfaces is complete and rapid; (2) That the vapours possess a certain and variable amount of penetrating power into loose fabrics; (3) That the vapours do not affect the colours of textile fabrics nor metallic surfaces (except iron and steel); (4) That its disinfecting powers are greater than those of SO_2 or chlorine. Similar conclusions were arrived at by Dr. L. Rideal, who pointed out, in addition, that the density of formalin vapour is practically the same as that of atmospheric air, and therefore the diffusion rates of the two gases were the same. In fact formalin was the most diffusible disinfectant known.

Sulphur dioxide is the gaseous disinfectant which from various practical considerations is most used officially in England and America at the present day. Like formalin, and unlike chlorine, it is a reducing agent. There has been much conflict of opinion on its value as a disinfectant. Since the experiments of Wolffhügel and Koch it has been greatly discredited in Germany, but other observers have had more favourable results.

In 1895 Dr. Kenwood collected the available evidence as to the disinfecting value of SO_2 from six sanitary areas in and around London, with a combined population of over 250,000.

One thousand three hundred and thirty premises were disinfected with sulphurous acid gas for diphtheria and scarlatina. In order to make out the worst possible case against the method, he adopted the view that every recurrence which took place within 14 days of fumigation was due to imperfect disinfection. This is a stringent test. The result only produced 4.1 per cent. of failures. With the collaboration of Mr. Walter D. Severn he further carried out a series of four laboratory experiments with the same object in view. In each experiment he placed six swabs, or pieces of lint, infected with the micro-organisms of diphtheria, streptococcus pyogenes, and staphylococcus pyogenes aureus at different heights in a room of 2000 feet cubic capacity, and the regular disinfection attendant of the district proceeded to fumigate the room in the usual way with measured quantities of sulphur. Out of the 24 swabs used in the experiments only one yielded a growth of the specific organism after fumigation, and that growth was considerably delayed. In each case control swabs gave a vigorous growth on the ordinary media. After each experiment was over, and the room had been ventilated until free of the gas, it was

again sealed up and again fumigated with exactly the same quantity of sulphur as had been used in the previous experiment. The experimenter then took a sample of the air of the room and analysed it quantitatively to get the amount of SO_2 present. This was found to vary in the four experiments. In each of the first two one tin of liquified SO_2 , said to contain 20 ozs., was used, and the air of the room was subsequently found to contain only .25 per cent of SO_2 . It was in one of these experiments that the only failure occurred. In No. 3 two such tins were used, and the strength of the vapour was found to be .5 per cent. In the fourth two 1 lb. sulphur candles were burnt, which gave a strength of .88 per cent of SO_2 . We gather from these experiments that disinfection with sulphurous acid gas, when thoroughly carried out, is a practical and efficacious measure in these diseases. To ensure a good result, an atmospheric strength of 1 per cent. of the vapour of SO_2 should be aimed at. One lb. of sulphur burnt gives off 11.7 cubic feet of SO_2 , which for 1000 cubic feet gives 1.17 per cent. As, however, it is almost impossible to produce complete combustion of all the sulphur used, $1\frac{1}{2}$, or even 2 lbs. of sulphur should be allowed for every 1000 cubic feet. As is the case with chlorine, it acts with far more certainty when moisture is present, and hence it is advisable to ensure that the air of the room be saturated with aqueous vapour. This may be done by boiling away a quantity of water in an open vessel in the room before fumigation, which, however, adds considerably to the trouble of the disinfection. Recent suggestions of the Society of Medical Officers of Health advise that the sulphur be burnt over a pail of water. Personally I have found the expedient of heating a brick in the fire to redness, and pouring water over it in an iron vessel immediately before fumigation, a satisfactory plan.

The practical deduction remains to be drawn as to what method of disinfection is the best for use after the notifiable infectious diseases. Probably the most scientific method consists in the spraying or brushing over of the surfaces of the room with a powerful antiseptic solution, such as the perchloride of mercury (1 in 1000), or the 1 per cent solution of bleaching powder recommended by Professor Delepine, but this method has great practical drawbacks. It is tedious and laborious, and it requires some skill on the part of the actual manipulator, as every particle of the surfaces to be disinfected must be brought in contact with the disinfecting agent. Moreover, in rooms where the wall-paper is not to be removed, it would probably not be available, as

the paper would be spoilt. A gaseous disinfectant is easily and simply used, and once it is generated its action is automatic—that is, it reaches the whole of the exposed surfaces without being dependent on the care and conscientiousness of the operator. On the other hand, gaseous disinfectants possess very little power of penetration. To ask for the disinfection of woven fabrics from a gas at the ordinary pressures and temperature appears to be asking an impossibility. Disinfection by moist heat is the rational way of treating such materials, and until we in Sydney are provided with an apparatus for the disinfection of articles by steam under pressure, the only choice of methods for disinfecting carpets, curtains, articles of clothing, etc., lies between boiling water, disinfectant solutions, and perhaps prolonged exposure to sunlight and fresh air. Undoubtedly most of such articles should be entirely banished from the infectious sick room from the very inception of the illness.

Of the gaseous disinfectants, formalin appears, from the evidence available, to be the best. It is efficient, it is inexpensive, and, if generated by means of the Alformant lamp, it is most easily managed. Moreover, it is non-poisonous. Next to formalin, one would be inclined to place sulphur dioxide, generated either from burning sulphur or from the liquified gas.

In disinfecting a room after a case, say, of diphtheria or scarlet fever, the steps depend on whether the financial position of the occupants permits of the stripping of the paper or not. It is taken for granted that all unnecessary carpets and hangings have been removed from the room at the beginning of the illness. After the room has been vacated by the patient, all bedding, linen, and clothing should be removed for disinfection by moist heat; in the absence of a public disinfecting chamber it can either be boiled or placed in a solution of perchloride of mercury (1 in 1000), except, of course, mattresses, which may be fumigated with the rest of the room, or destroyed, if the patient's means permit. All boxes, drawers, and cupboards should be thrown open, and all articles of no value destroyed by fire. Orifices, such as fireplace, window chinks, ventilators, and doors, except the door of egress, should be carefully pasted over with brown paper, and the room may then be fumigated either with the Alformant lamp and a sufficiency of formalin tablets, or with sulphur dioxide, after taking measures in the latter case to moisten the air of the room. If powdered or roll sulphur be burnt, it should be moistened with methylated-spirit to ensure

combustion, and precautions must be taken to guard against fire. The room is then vacated, and the door of egress sealed up. After six or eight hours the room may be opened and must be thoroughly ventilated. All woodwork, including floors, paint, and articles of furniture should be scrubbed with soft-soap or an acid solution of perchloride of mercury or both in turn. Finally, if the occupants can afford it, the wall-paper may be stripped off and the walls and ceilings washed with hot lime before repapering.

NOTES ON AN OUTBREAK OF DIPHTHERIA IN A COUNTRY DISTRICT.

BY W. E. STEVENS, M.R.C.S., L.R.C.P.,
KUROW, NORTH OTAGO.

THE following is a short account of the recent outbreak of diphtheria, which lasted from the beginning of June, 1898, to middle of August, —24 cases in all.

History of Outbreak.—Following a drought (only about 3in. of rain during last 12 months), I was called to see the first case on June 5th, three miles from the township of Kurow, in North Otago—a child aged 2 years, which was dead before I arrived, but found four other children with the membrane hanging in shreds from their throats, enlarged glands and high temperature. As they were recovering I did not use serum, but administered full doses of iron and quinine and painted throats with a mixture of guaiacol and olive oil—equal parts, frequently used. The causes in this instance were an old sheep-dip, which had not been cleaned out since used months before—a woolshed about 50 yards from the house, with the usual accumulation of droppings from several thousand sheep, and a privy, all on windward side of house. A water-race ran under seat of privy and washed sewage all over surrounding ground. There was also an outhouse, used for storing cowdung for fuel, in a very unsavoury condition, and house itself was small and over-crowded.

The next case was in township, and the cause was bad drainage; all slop-water from house ran into blind drain (covered-in hole). The pipes contained a large accumulation of filth, and the stench was horrible. The pipes had the usual bends as traps, but they were choked with filth.

The next case occurred as follows:—A girl, 16 years of age, left her situation in Kurow and went home to Hakataramea (on the opposite side of the river) with *apparently* an ordinary-looking quinsy sore throat. No membrane formed and she recovered, without suppuration,

with the usual remedies; but one week afterwards her two younger sisters developed diphtheria, and subsequently two other children in same house. I was unable to detect any specific cause in this instance, except the general bad state of the township, there being over 20 cess-pools and about twelve wells for drinking purposes, and a gravelly subsoil. The county council have ordered the cleaning out and closing of all these cesspools.

The next two families took it from some of the children having played with the children last mentioned. In each instance every child in the house developed the disease—six in one house and five in another—and this state of affairs went on in each house it broke out, except one. It was a curious coincidence that a fresh crop of cases occurred every seven days. This was so marked that one could not fail to notice it.

Treatment.—First case in which I used serum, child aged 10 years; temperature 105° F., pulse 156; four days ill; membrane all over tonsils, uvula and soft palate down pharynx as far as could see, and soft parts very oedematous and glands of neck enlarged. She was given 5 c.c. Schering's anti-toxin (which I had over two years in stock). Temperature 12 hours afterwards was 100° F., pulse 96. I gave her 2½ c.c. anti-toxin 12 hours after first injection, and next day temperature fell to normal, and membrane was coming away in large pieces larger than a finger-nail; the throat was painted with equal parts guaiacol and olive oil (and this I used in all my cases). She recovered without a bad symptom, and there was no need of my seeing her after the third day.

In all 18 cases were treated with serum; all recovered; two had paralytic symptoms, three had acute rheumatic pains, two of whom were the same children that suffered from paralytic symptoms; for the remaining 15 there is nothing to be said, except that each case had two injections, the second one being 24 hours after the first, and there was no need of my seeing them after giving second injection, having no complications, and being well in a week.

Of six cases treated without injections, one died before I saw it, after six days' illness, and five others were recovering (all in same house), and were given ordinary iron and quinine in large doses and throats painted as said previously. Their recovery was slow, taking nearly three times as long as those treated with serum.

Complications.—Of two children who had paralytic symptoms, in the first case child was only 3½ years old; I tried to do without serum for four days. Seeing her going

down hill I then gave serum, and she began to improve, but had I given the serum earlier the paralysis may not have supervened. Vomiting was a very distressing feature in this case, lasting nearly a week. Had great difficulty in swallowing for 10 days, then gradually improved, but it was nearly a month before the child could walk. A stimulating liniment was rubbed into muscles of neck frequently, and she was given tonics, and all symptoms gradually disappeared.

The second of these children was a very complicated case. Always a delicate child to start with, aged 10 years, membrane all over tonsils, uvula, and greater part of soft palate and pharynx and glands of neck enlarged; temperature, 104°, pulse 132. She was given 15 c.c. liquid serum from British Institute of Preventive Medicine, followed by half as much 24 hours later. The throat cleaned in a few days, then the following complications occurred in the order stated:—Paralysis of muscles of throat, lasting about 14 days, only swallowing few drops of nourishment at a time; septic pneumonia, left base, lasting about same time, then heart started to go at a gallop, and with a *bruit de galop*, from loss of power in vagus I suppose, and she had hemiplegia of right side of body, the paralysis affecting same side of face. All these symptoms have disappeared except the hemiplegia, and she is now able to move leg, and there is every probability of it leaving her. She was given iron and digitalis to control heart.

Three children were attacked with acute pain in muscular system, like rheumatism, and screamed when touched. In one only the temperature rose. They were all treated and quickly recovered under sodium salicylate. There was no swelling of joints.

Serums Used and Remarks, on Same.—Schering's liquid anti-toxin for diphtheria I liked best of all; the dose, 10 c.c., is not too large or too small, and it keeps well (I had mine over two years), and answers like a charm.

Burroughs, Wellcome's dried serum I could not get to dissolve either in hot or cold water, with or without addition of alcohol, but as I was on the rocks, and could get no other, I pounded it up in a well-sterilized mortar, mixed with water, and used with a large-sized needle. The re-action was alright, but it was a lot of bother, and the results were not as good as Schering's.

Serum from British Institute of Preventive Medicine exceedingly good, and what is more, equally as cheap; but you have to get it first, no firm seems to keep it in stock. I had a few

vials given me; the dose is from 20 c.c. downwards.

Behring's liquid is exceedingly good, and dose is small, but is more expensive. It is issued in four forms:—

No. I.—Single remedial dose, or 600 units of immunity.

No. II.—Double remedial dose, or 1000 units of immunity.

No. III.—Treble remedial dose, or 1500 units of immunity.

No. 0.—Prophylactic dose.

No. I. cost me 4s. 6d., No. III. 9s.

In two instances I gave protective doses to children where other cases were in progress in same house. One case developed diphtheria 14 days after protective dose, and the other about a month afterwards, but as they were running about with the convalescents all the time it was no criterion. Had they been removed from the house of infection I am quite confident they would have escaped.

This report is somewhat incomplete without a bacteriological examination, but the cases were so well marked that it was quite superfluous.

In Conclusion.—I was struck with the coincidences of the fresh crop every seven days; also, that during the outbreak every kind of sore throat seemed to be going the rounds, and what started as an ordinary infectious sore throat in one member of the household, went on to diphtheria as other members took it, the disease increasing in intensity the further it went.

I would urge everyone to use serum as early as possible in every case, and on no account to neglect giving the second dose 24 hours afterwards. Also, to see that they keep some serum in hand themselves, as I had considerable difficulty to get supplies.

Strict antiseptic precautions were taken with each injection (syringe boiled before and after use). No abscess or bad result followed in any case. In two or three cases a slight rash like Rötheln appeared, but that was all. Under the old treatment I am quite sure a larger percentage of these cases would have died.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 28th October, at 8.15 p.m.

Business:—General.

G. T. HANKINS, Hon. Secretary.

FOUR CONSECUTIVE CASES OF TRACHEOTOMY FOR LARYNGEAL DIPHTHERIA.

BY FRANK A. NYULAST, M.B., Ch.B. MELB.,
HON. SURGEON WOMEN'S HOSPITAL; AND
CHARLES J. TROOD, M.B., Ch.B. MELB.

WE think the following cases, more particularly as they occurred in private practice, sufficiently interesting to be put on record. They each required tracheotomy, which was performed at a late stage of the disease in every instance. Three, which had subsequent injections of anti-toxin, recovered; one, for which no anti-toxin could be obtained anywhere in Melbourne, was fatal. The ages varied from 11 months to four years. We are of opinion, from our past experience of tracheotomies done under like circumstances, that the anti-toxin was a material factor in saving the cases that recovered.

CASE I.—A. P., aged 11 months, a small, well-nourished, but anæmic female infant. Has been ill two days, tonsils swollen and inflamed with patches of false membrane on both, voice hoarse and feeble; inclination to laryngeal breathing, temperature 101° F., pulse 120, breath fetid, dulness at base of both lungs posteriorly. The child is prostrated, refuses to leave its mother's arms, is disinclined for food and takes the breast with difficulty and is very restless. The bowels are very loose, and there is swelling and tenderness of glands at angles of lower jaw. In addition to ordinary routine treatment 2 c.cs. of Behring's No. "0" serum were injected, but the child got rapidly worse during the day, and tracheotomy was advised. But the parents withheld consent till 11 o'clock at night, when it was clear even to them that death was imminent. There was then marked "dyspnœa with recession," complete absence of voice and of audible cough, lividity of the surface and extreme prostration. To do this operation at midnight on an infant in a private house, with a bad light, and only the father as assistant is by no means easy, especially when the false membrane (as in this case) has extended into the trachea from which it had to be removed as a cast nearly 3 inches long by means of sponge and forceps, after the insertion of the tracheal dilator. Only then was the child with some difficulty resuscitated. From this on, however, the child slept well, but when seen about 11 o'clock in the morning there was an absence of tracheal secretion, and a little returning dyspnœa with a temperature of 102°, and occasional diarrhœal attacks. The

full dose Behring's No. 2 serum was injected at 2 p.m., and, though the child had a critical night, next morning tracheal secretion became free, and a piece of membrane an inch long was suddenly coughed up, giving great relief. The temperature had fallen to 99°, and the child was much better. A full dose of Behring's No. 1 serum was now injected, and general stimulo-tonic treatment, which the child now took well by the mouth, continued. The temperature rose to 101° the same evening, but thereafter gradually fell to normal by the sixth day. The tube was finally removed on the fifth day after the operation, a rubber one having been substituted on the third day. Steam was used as circumstances indicated. Diarrhœa, accompanied with some bronchial catarrh, now returned with renewed violence, and gave us great anxiety, but it gradually yielded to careful treatment on modern lines. The child has since grown into a robust, jolly little girl.

CASE II.—R. J., a fine well-developed boy, aged four years, had been treated by a chemist for several days for "congestion of the lungs." When seen in the evening had marked patches of firmly-adherent membrane on the tonsils. Tongue furred, breath foul, voice hoarse, cough croupy, commencing stridor with bronchial catarrh, bowels confined, pulse rapid and feeble, temperature 103°, skin dusky. It was hoped that by putting the child on suitable treatment, together with the use of a steam tent and injecting antitoxin, as soon as it could be obtained (which was not before the following morning in this case), that some improvement might be effected, but in spite of treatment (and before we could obtain the anti-toxin) the breathing rapidly became more and more seriously impeded, and when seen at midnight both lungs were dull posteriorly towards the bases, the breathing was tubular, laryngeal dyspnœa and cyanosis were fully developed, and the child was obviously sinking fast. Tracheotomy was performed as rapidly as possible, and as showing the danger to the operator in these cases, a piece of membrane was coughed up into the face of one of us while the trachea was being dilated. We now use a gauze face protector. Immediately after operation the full dose of Behring's No. 2 serum was injected, and this was repeated on the following day. The silver tube was replaced on the third day by a rubber one, which was removed on the fifth day, so that a far more successful recovery resulted in this case, than the severity of the symptoms had led us to hope for; the child, in fact, being up and about within 10 days.

CASE III.—A. S., a small, poorly-nourished female child, aged three years, had been ill three or four days before she was seen. This was, it is believed, a primary laryngeal case, and at the time of operation the patient was deeply cyanosed and prostrated. She required energetic measures to resuscitate her after the tracheotomy; removal of membrane from the trachea was essential during operation in this case also. She rallied very well till the third day, when she gradually sank with a very weak heart. For this patient, unfortunately, no anti-toxin could be obtained anywhere in Melbourne, the supply having become exhausted.

CASE IV.—C. R., a delicate boy, aged three and a-half years, was treated by his parents for "croup" for four days. In great alarm they then sent for one of us at 6 a.m. Their alarm was well-founded, for all the symptoms of extreme laryngeal dyspnoea were present. Membrane on both tonsils, marked swelling of glands at angle of right jaw, rapid failing pulse, temperature 101°, marked epigastric retraction, prostration and cyanosis. Immediate operation in the home, or its performance at the hospital close by was advised; the hospital was declined, so the operation was undertaken at home, the parents being warned that on account of his extremely prostrate condition there was more than the usual risk of the boy dying on the table. He was virtually dead for about two minutes, but artificial respiration, after widely dilating the trachea and removing the obstructing membrane and blood-stained mucus, induced breathing at first at long intervals, and then more regularly. After breathing was more fully restored the tube was inserted, the child put to bed with hot bottles, mustard leaf over heart, and brandy and coffee enema. This patient took a long time to rally, and curiously enough was not quite conscious till the evening, although he had been operated on in the morning. The full dose of Behring's No. 2 serum was injected immediately after operation.

The trained nurse called into this case was so continuously exposed to the infection by her assiduous nursing that she also unfortunately developed diphtheritic patches on her tonsils about the sixth day. She was treated at the Melbourne Hospital with Behring's anti-toxin and recovered satisfactorily.

The child's temperature on the day following operation was 101°, the pulse weak and rapid (130). The general prostration was still very serious, but the breathing better. The tracheal

secretion was, however, rather scanty, so a second injection of Behring's No. 2 was used, and a piece of membrane was subsequently ejected. The temperature was normal next morning, pulse 120, feeble; there was a good deal of stiffness and swelling of the right side of the neck, much nasal discharge of an acrid character, troublesome cough and persistent prostration with irregular exacerbations of fever at night, and refusal of nourishment by the mouth. Breathing comparatively easy, but rather rapid. Abscess of the neck was threatening, and cardiac paralysis was feared. Strychnine and digitalis, together with nutrient and stimulant enemata, preceded by a calomel purge, were given regularly. On the third day the tube was removed and replaced, as there was still some membrane on the trachea. It was replaced by a rubber one on the fifth day. This gave a good deal of ease to the greatly swollen neck. Here a deep abscess had formed on the right side, and was opened next day. This allowed the gaping wound in the trachea to come together better, and its closure was assisted by Mead's plaster after the final removal of the tube on the seventh day. The child was allowed out in the sun before the end of the third week, and gradually recovered his strength and is now quite well.

Cases II. and IV. were examined bacteriologically, and yielded the Klebs-Löffler bacilli in profusion, but such diagnosis in any of these cases was rather a work of supererogation.

ASTHMA RELIEVED BY DILATATION OF THE CERVIX.

ARTHUR W. MARWOOD, L.R.C.S. & P.Ed.,
L.F.P.S.G., GEELONG, VIC.

Miss S—, for 20 years a constant sufferer from asthma; the attack more severe at the menstrual period. The flow was painful and evidently obstructed. I dilated the cervix, but had great trouble in getting even a No. 1 Hegar through. I then gradually worked up to No. 12. The results were good, as not only was the dysmenorrhoea relieved, but the asthmatic symptoms disappeared within twenty-four hours, and now, nine months after the operation, the patient has remained well. The asthma in this case was truly reflex in its character.

Wanted, index and title-page for *Lancet*, vol. ii., 1897. Any gentleman having same to dispose of kindly communicate with Librarian, Editor's Library, 121 Bathurst-street. Telephone, 2,027.

CASE OF POST-INFLUENZIC MASTOID SUPPURATION RUNNING A LATENT COURSE, AND PRESENTING THE SYMPTOMS OF TRIGEMINAL NEURALGIA,

BY T. K. HAMILTON, M.D. DUB. F.R.C.S.I.
ADELAIDE.

W. L., male, aged 57 years, came to me on June 8th last, kindly sent by Dr. Counter of Willunga, with a history of having had influenza seven weeks previously, and of having suffered from continuous pain for the greater part of this time, over the left side of the head. Dr. Counter stated in his letter that he thought the case was one of mastoid trouble

When seen by me on the day of his arrival in town, the prominent symptom complained of was pain referred to the left side, and extending from around the ear below, to the parietal eminence above, very much more intense over the upper part of this area, and more in front of the ear than over the mastoid, though certainly involving this latter region to some extent. On the next examination the pain was found to be confined to the front of the ear, none over the mastoid, and to extend upwards over an area which mapped out fairly accurately the distribution of the temporo-auricular branch of the fifth nerve. The membrana tympani on this side was uniformly hyperæmic, movements much impaired, the H.D. reduced to Loud Voice at 6 m., Watch not on contact, but there was no local tenderness upon deep pressure over the mastoid, nor was there any sagging of the supero-posterior wall of the canal close to the tympanic ring. There was no constitutional disturbance. The diagnosis of influenzic otitis with temporo-auricular neuritis was made (in which opinion Professor Watson on a subsequent examination concurred), and pilocarpine hypodermically, with vesication in front of the ear, was the treatment adopted. Under this treatment the membrane cleared up and hearing gradually improved, but no relief of the neuralgia was experienced. The pain all the time persisted and became more intense, and that in spite of the exhibition of various anti-neuralgic remedies, repeated blisterings to the trunk, and terminal filaments of the temporo-auricular nerve, intra-neural injections of solutions of carbolic, and of osmic acids, etc. So very severe was the pain at times, that even large doses of morphia subcutaneously secured only the most temporary relief. On June 21st tenderness on pressure over the mastoid was for the first time elicited,

and Wild's incision was made the same day. This was followed by comparative freedom from pain for the next few days, but it soon returned with, if possible, increased severity. Dr. Poulton then saw the patient, and agreeing with our diagnosis, it was decided that he should resect the offending nerve. On the morning of the day (July 9th) for which the operation was arranged, however, the patient developed cerebral symptoms, having just before had some unsteadiness of gait and amnesic aphasia; he became delirious with a temperature of 105°, and passed rapidly into a comatose condition. The following day, as his condition was apparently so hopeless, and as no clue could be obtained from the symptoms as to the exact nature of the cerebral trouble, exploration of the brain was, after consultation, decided against, but as during the night some alteration in the symptoms, indicated by return of mobility of the left pupil—both pupils having previously been absolutely fixed to the strongest light—and some relative rigidity of the right arm, it was thought advisable to give him the chance—necessarily a very remote one—of the operation. The mastoid cells were first opened, and as they were found to be quite healthy, nothing further was done in this locality. The usual trephine opening was then made to explore the temporo-sphenoidal region, and finally the cerebellum was explored, but in each case with negative results. The patient died that night.

The *post-mortem* made the next day, revealed the following conditions:—There was a purulent leptomeningitis involving the whole of the base, the cerebellum and upper part of the cord, but no sign of epidural or other abscess. On opening the middle ear and mastoid antrum, the former was found filled with semi-organized exudation, and the latter contained a small quantity of greenish-yellow pus; some pus was also seen lying close to the lateral sinus, and apparently continuous with that found in the antrum. The sinuses, lateral and petrosal, and the jugular were free from clots, and the labyrinth semi-circular canals and cochlea were normal. (Specimens exhibited at our last meeting).

The interest of this case centres in the unusual and remarkable latency of the symptoms of the antrum suppuration, and the singular absence of direct evidence of this latter condition seems to me to make the case well worthy of being placed on record. That a mistake in diagnosis was made the *post-mortem* only too clearly shows, but that such was, to some extent excusable will, I think, be admitted. Dr.

Counter, it will be observed, in the earlier stage of the illness made a more correct diagnosis than we did. But when you consider that from the time the case came under our care the one and only positive symptom of mastoid suppuration was the pain, and that confined, for a good part of the time the patient was under observation to an area representing the anatomical distribution of one single nerve, and when again you consider the absence of purulent otitis media—the usual condition co-existing with influenzic mastoiditis—also the absence of one or only occasional presence of the other of the two signs which are said to be pathognomical of mastoid suppuration, viz., sagging of the supero-posterior wall of the meatus and tenderness on pressure over the mastoid—when, I say, you consider all these combined, I think it will be allowed that the mistake which led us to fix our attention on the peripheral, to the exclusion of the central lesion, was a pardonable one to make.

The literature of influenzic otitis furnishes, I find, at any rate, one analogous case. Spira (Cracow) exhibited a case before the Austrian Otological Society * in which the diagnosis of trigeminal neuralgia was made under very similar circumstances. In his case there was acute exudative otitis following Influenza, and paracentesis of the membrane was performed, there was only transient evidence of irritation of the mastoid region, and not until some time afterwards did pronounced inflammatory symptoms point to the mastoid antrum as the true origin of the trouble when a periosteal abscess formed, and this led to the evacuation of the purulent contents of the cavity.

The records of our Society also furnish two cases of interest bearing upon the occasional irregular symptomatology of mastoid suppuration. The first case recorded by Dr. Giles in November, 1886, in which suppuration of the mastoid occurred without perforation of the membrana tympani, and the second, a case recorded by myself some five years ago, in which primary mastoid periostitis went on to suppuration and that without anything whatever to be seen wrong with the membrane or any impairment of hearing. This latter kind of case is extremely rare. Politzer has observed only three such.

Buck (New York) offers an explanation for the comparative absence of local pain such as we had in the case under consideration. He says: "possibly amongst various living organisms, which in suitably constructed mastoid processes produce serious inflammation and ultimately

destruction of the tissues involved, there may be one or more species that create toxin possessing a decidedly anæsthetising power over sentient nerve fibres," and as a proof of the reasonableness of such a belief he mentions the painlessness of tubercular inflammation of the middle ear. * These toxins may have come into operation here after the patient passed out of Dr. Counter's hands, and the fact that influenza started the trouble by its blood-poisoning influences would favour this hypothesis.

Lastly, the case and its fatal termination affords us, I think, an object lesson in aural surgery, and clearly emphasises the importance of always exploring the mastoid antrum in every case, especially those following influenza, in which pain in or around the ear persists, and in which there exists any doubt as to the origin of the symptom.

I am indebted to my colleague, Dr. Fischer, for the careful attention he bestowed upon the case, for making the *post-mortem*, and for his report of the same.

A CASE OF HYDATID DISEASE OF THE BRAIN.

BY G. A. FISCHER, M.B., CH.B., ADEL.

READ BEFORE THE SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION, ON SEPT. 29TH, 1898.

On the 20th of January of the present year, Edgar J., of Murray Bridge, 11½ years of age, was brought to me by his mother, on account of the loss of the sight of the right eye, which had occurred suddenly on Christmas Day of the previous year, whilst the boy, presumably in good health was participating in the festivities of his native township. His legs became suddenly weak, he felt faint and fell, but apparently did not lose consciousness, and immediately thereafter noticed that the sight of the right eye was gone. He has been bathing very much lately and appears now to have a cold.

Previous History.—When 4 years of age, the boy, in falling from a sofa, struck his forehead against a projecting screw—the parents cannot remember which side of the head was struck—and, whereas no immediate ill effects therefrom were noticed, yet since then the child has at rare intervals vomited, apparently without concomitant gastric trouble; and suffered from occasional frontal headaches and nightmare; that the vomitings, though at first occurring three and four times a year, have gradually become more frequent and take place now almost every month. Has always suffered

* Monatsch. für Ohrenheilkunde, July, 1896.

* New York Medical Record, July 27th. 1896.

from constipation, and needed regular purgation. Has always been a bright, intelligent boy.

Family History.—An uncle on his father's, and another on his mother's side suffer from old-standing hip disease tuberc (?) A maternal aunt has just recovered from severe double optic neuritis due to anæmia and menstrual derangement. No specific history.

Status Præsens.—A bright, intelligent boy, well nourished, but pale; left side of neck and left shoulder stiff and painful (recent); complains of blindness of the right eye, also of pain of a dull aching character, more or less constant during the day, but absent at night-time, across the forehead, chiefly over the left superciliary ridge and left frontal eminence. There are two symmetrically situated scars, one to the outside of each frontal eminence—the right frontal bone slightly more prominent than its fellow (probably congenital), otherwise nothing unusual noticed in the size or shape of the head; tapping the skull does not reveal any localised painful area nor intensify the existing pain; motor and sensory apparatus apparently normal, also reflexes; nothing abnormal detected in chest or abdomen; urine contains neither albumen nor sugar; no external evidence of hereditary specific disease.

Eyes.—No paralysis of any of the external ocular muscles; pupils react normally, left less actively; there is well-marked neuro-retinitis (fairly recent) of both eyes; veins distended and tortuous, and in places hidden by the retinal œdema; a great deal of exudation (also fresh) around both discs and between them and maculæ; macular regions themselves apparently unaffected; vision of right eye, *nil*; vision of left eye, $\frac{6}{6}$ partly, and its field concentrically contracted, but no hemianopia; optic neuritis slightly more marked on the left side; no hemianopic pupillary reflex.

Dr. Symons saw the case in consultation and watched it throughout with me.

As the neuro-retinitis was of fairly recent origin, and there was a history of, and evidences of a chill, as shown by the stiff and painful neck and shoulder, hydrargyrum was prescribed by mouth and inunction, and bromides. Later on, iodide of potassium was added, and finally only the iodide was administered; and for some weeks the boy seemed to be improving in his general condition—slept well, ate well, and took a fair amount of outdoor exercise; headaches were but rarely complained of, and when present were easily amenable to small doses of antipyrin; and the ophthalmoscope showed gradual subsidence of the intra-ocular inflammation; but the vision was continuously and fairly

rapidly diminishing, and by the end of the eighth week no vision was left in the previously good eye. The ophthalmoscope now revealed small areas of choroidal atrophy between the disc and macula in both eyes, and both macular regions smudged, as it were, by the passage over them of the dirty tips of miniature fingers and commencing atrophy of both discs. The boy now began to complain of feeling weak, his legs at times threatened to give way beneath him, and he tired easily, yet he walked straight, and there was no evidence of any incoördination in his gait. Dr. T. K. Hamilton now saw the boy, and also watched the case throughout with me.

A few days subsequently (July 14th) Dr. J. C. Verco examined the boy in consultation, and found in addition that, whereas unsteady when balancing on either leg alone, he was less stable on the right than on the left—that he had therefore, a slight amount of incoördination of his right leg; but no other abnormality was detected by him, and he would, therefore, not advise operative interference, but to continue on with his medicinal treatment.

Early in the morning a week later I was summoned to see the boy, as he was having a fit, and, arriving a few minutes later, found him sleepy and somewhat disinclined to answer questions, yet answering correctly and intelligently whenever he vouchsafed a reply. The seizure had evidently been a general one, judging from his mother's description. There had been tonic and clonic spasms; the boy had not bitten his tongue, but had involuntarily voided his urine. For some ten minutes during my stay he was continually opening and shutting both hands, saying that they felt peculiar, and that another attack was surely coming on, as the one just experienced had commenced with the same peculiar sensation in the two hands. However, no further seizure occurred, and after a good sleep the boy was about again, but was somewhat low-spirited for a day or so afterwards. His headaches began now to become constant again, but were still amenable to small doses of antipyrin.

A week or more subsequently the opinion of Dr. Napier was sought by the parents, and on his advice the boy was taken home to the country. During the first week there was rather marked improvement, but it was only transient, and six weeks later he was brought again to me. I now found anosmia to be present, and there was also some paresis of the left external rectus.

As we could not promise the parents a definite cure, but possible relief only, they refused to submit the child to operative interference,

and a few days later he left again for the country, where he remained in *status quo* till his death, which occurred rather suddenly on the 2nd of August. Death was preceded by coma for a few hours.

At no period of the disease was there any evidence of a choked disc on either side.

Through the kind permission of the parents I was permitted to open the skull, and found that there was no thinning of the bone anywhere, cranial sutures showed no sign of separation, and there were no microscopical evidences of meningitis, or evidences of any great pressure, but abutting through the cortex of the left parietal lobe, over an area the size of half-a-crown, was a hydatid cyst the size of a cricket ball. It had developed at the expense of the left parietal lobe. The most prominent part of the skull was the right frontal region, which we during life regarded as congenital—*i.e.*, was in that part most remote from the parasite. Dr. J. C. Verco has also remarked a similar condition (or shall I say coincidence) in a case reported upon by him in these journals. I was not permitted to examine the viscera.

A case somewhat similar in symptoms and progress has been recorded by Dr. Graham in this journal, where, on account of the symptoms, though being those of a cerebral tumour, not being sufficiently marked to enable the tumour to be defined or localised, no operation was performed, and at the autopsy a hydatid cyst the size of a hen's egg was found in the right occipital lobe of the cerebrum.

The present case is another illustration how a cerebral tumour, even if large, may run a latent course if it develops in a part whose destruction causes no noticeable local symptoms, and if its growth is slow so that the adjacent parts may yield, and this may even happen in the immediate vicinity of those parts whose irritation or destruction causes the most striking local symptoms, *e.g.*, as in this case in the region of the muscle nuclei. In such cases (says Knies) the tumour simply displaces the parts, but does not destroy them or even interfere materially with their function.

The points in the present case to which I would like to draw particular attention are :—

1. The close resemblance between the fundus changes here to those so frequently found in connection with albuminuria and occasionally in some other general diseases (systemic).

2. The neuro-retinitis optica was more marked in the eye on the same side as the tumour. Many men still maintain that the neuro-retinitis optica is generally in the eye on the opposite side to the tumour, but Dr. Martin, in his study

of 201 cases of intra-cranial tumour, including 21 of hydatid disease of the brain, says : "Where a difference in the amount of the optic neuritis in each eye is noted, that it is more than twice as probable that the tumour is on the side of the more marked optic neuritis"—(*Lancet*, July 10th, 1897)—and that optic neuritis is most frequently present if the tumour be a glioma, or cystic, or a hydatid.

3. Onset of sudden blindness, and that in the eye on the opposite side to that of the tumour : The late Dr. Davies Thomas has pointed out that, in hydatid disease of the brain, blindness, no matter where the cyst was found, often developed suddenly, and that, in those cases where the blindness was at first unilateral, the cyst was always found on the same side ; and Dr. Graham has since added another case of blindness commencing on the same side as the tumour.

4. The appearance of anosmia : Loss of smell (says Gowers) has been noted in rare cases of tumour in various parts of the brain, but with singular infrequency in any part of the same, suggested due to olfactory neuritis (hypothesis.)

5. The later presence of internal strabismus on the same side as the tumour : Dr. Martin, in the paper to which I have alluded above, says : "The tumour is generally situated on the side on which the internal strabismus is noted."

6. The comparatively small amount of pain in the head, its speedy amenability to small doses of antipyrin, gr. v. s.o.s., also that it was not increased by tapping the skull ; and whereas the tumour had become cortical, tapping did not disclose any painful area ; nor did the site of pain correspond to the tumour in position. Gowers says when the disease is at the surface of the brain the pain usually corresponds to it in position, and gentle tapping causes pain over the seat of the disease and not elsewhere. Dr. Martin says the pain is more likely to be absent if the tumour be in the motor area or the corpus callosum.

7. The presence of the parasite on the left side of the cerebrum, and in a male subject : Dr. Graham draws our attention to the fact that males are more frequently affected by hydatids, and that the right side of the cerebrum is more frequently affected than the left.

It will surely fall to the lot of one or more of us to meet with cases of intra-cranial mischief where we shall be in doubt, not only as to the nature of the trouble, but also as to its locality, and we shall be confronted, as in the present case, with the question of trepanation or of awaiting developments whilst submitting the patient to various medicinal measures.

"It is now recognised," said Dr. Ferrier, in opening the discussion on the treatment, curative and palliative, of intra-cranial tumours, at the recent Edinburgh Convention, "that iodide of potassium and hydrargyrum often relieved the symptoms and presumably influenced the growth of intra-cranial tumours which were not specific and even malignant." Others add arsenic and other drugs as having been of value. One is, therefore, in certain cases bound to try these first; but, in indefinite cases, should trephining be done? Dr. Ferrier says "the decision of this difficulty must, he thought, depend upon each particular case, and it was therefore better, perhaps, to put the responsibility of deciding upon the patient" (or his parents in this case) "and his friends, after explaining to them all the risks of the proceeding." But Horsley and others have drawn our attention to the fact of the subsidence of optic neuritis and relief of symptoms after operation undertaken with the view to the removal of cerebral tumours, and this not in cases where the tumour was wholly removed, but also when only partially, and in others when not even interfered with; and this should influence us to urge more strongly upon our patients the value, nay, even in some cases the justice and desirability of trepanation in indefinite cases, as thereby not only relief to symptoms may be afforded, but even life may be saved.

The parasite could easily have been removed by trephining, as suggested by Dr. Watson, the highest point of the superior temporal ridge.

We have received from Messrs. Burroughs, Wellcome and Co., of Snow Hill, London, and 108 Pitt-street, Sydney, some specimens of tabloid zinc oxide. The therapeutic uses of zinc oxide are many, but the imperfect solubility of pills made from this drug has hitherto proved a bar to its administration. We find, however, that this tabloid on being mixed with water becomes rapidly disintegrated, which enables it to be advantageously employed as a therapeutic agent. Zinc oxide has been administered with good results in the treatment of summer diarrhoea of infants and adults, also in gastralgia, epilepsy resulting from peripheral irritation, nervous tremours, and unsteadiness of chronic alcoholism, as well as for whooping cough and chorea. The tabloids of zinc oxide are issued in bottles containing 100 each.

WANTED.—Applications will be received for the position of Surgeon to the Walsh District Hospital, Montalbion, up to the 4th of November next. The salary will be £275 per annum, with the right to private practice. Testimonials and references must be forwarded with the application, and applicants must state age. The successful applicant must take up the duties about the 16th November next. Wm. D. RAWLINGS, Secretary, Irvinebank, Queensland.

CASE OF SPLENECTOMY FOR HYPERTROPHY OF SPLEEN.

By H. C. GARDE, F.R.C.S., SURGEON TO THE MARYBOROUGH HOSPITAL, QUEENSLAND.

J. J. R., aged 37, with good family history, had never been laid up previous to this; no malarial or syphilitic taint, and blood in a healthy condition. Seven months ago, first noticed a swelling in left side of abdomen, but did not feel much inconvenience; it kept on increasing so rapidly, that on coming under notice a month since, it pretty well filled the left half of abdominal cavity, measurement $37\frac{1}{2}$ inches around waist. He was put on pot. iod. c liq. Fowleri. He returned in a fortnight; tumour still increasing, 39 inches. He then came into hospital, and after remaining ten days, measurement increased to 41 inches. He suffered the usual symptoms, consequent on such a large abdominal tumour, and urged on me to operate, a thing, by-the-way, I felt rather loath to do. However, on his insisting, as life became unbearable, on June 12th I proceeded to remove the organ. An incision from the ribs to the pubes, a little to the left of the median line, was first made, but as it was found to be impossible to get the spleen through the opening, one was made at right angles extending back to the lumbar region; the hilum was found to be short and flattened in the antero-posterior direction, so some trouble was experienced in placing large pressure forceps in position, and applying the ligatures, which were of strong silk. The hilum was next cut close to the spleen, and the lower portion of it drawn through the opening. Adhesions, to a fairly large extent, were found on the upper and back portion of spleen in a position in which it was impossible to introduce the hand previously; there was not much oozing from the broken down adhesions; one of the arteries in the pedicle bled freely, but was secured and ligatured; the abdomen was next washed out with a weak warm saline solution, about three parts of which was allowed to remain, and the abdominal wounds closed. The operation was performed at 10 a.m. and he died at 11.30 p.m. of shock. Some idea of the difficulty of removing the organ may be gathered from the weight and size, which were as follows:—Weight, $7\frac{1}{2}$ lbs; length, $13\frac{1}{2}$ inches; circumference, 18 inches. I received every assistance from Drs. Luther and Robertson, to whom I take this opportunity of returning my thanks.

THE CAUSE AND PREVENTION OF TYPHOID FEVER WITH REFERENCE TO THE PROPOSED METROPOLITAN DRAINAGE SCHEME (HOBART).

BY GREGORY SPROTT, M.D., D.P.H., HEALTH OFFICER FOR THE CITY OF HOBART, HON. PATHOLOGIST GENERAL HOSPITAL, HOBART.

(READ AT A MEETING OF THE ROYAL SOCIETY OF TASMANIA, AUGUST 8TH, 1898.)

TYPHOID fever is a specific febrile disease. It is no new disease, as many suppose. It was known to the early Greek writers, and Hippocrates describes cases "characterised by diarrhoea, offensive watery stools, bilious vomiting, typhinitis abdominal pain, red rash, epistaxis, sleeplessness," etc., which were undoubtedly typhoid fever. According to Murchison, *galens hemitriticeus*, or *febris semitritiana*, was also typhoid.

Until the year 1836 it was much confused with typhus fever. In 1849 Jenner (now Sir William) demonstrated that these two fevers were depending upon different causes, that they did not prevail together, and that the one did not communicate the other. Since the year 1869 the Registrar-General of England has classified typhoid as a distinct and separate disease.

In geographical distribution typhoid has a wider range than any other acute infective disease. It is found amongst every European nation; in America, China and Japan. In India it is the most fatal of all diseases to which the British soldier is liable.

On the Australian continent and Tasmania it counts as one of the standing diseases, and is indeed the scourge of this new world. So long ago as 1830 Drs. Scott and Milligan reported that an epidemic occurred among the British troops stationed at Hobart.

It might well be described by Murchison as a "ubiquitous disease," or, as Hirsch aptly puts it, "the incidence of the disease (typhoid) is as wide as the globe."

In European countries it is most prevalent in autumn. In the Australian colonies we find the greatest prevalence and highest mortality during the months of January to March.

What the exact effect of climatic influence is on the prevalence of typhoid is more or less a matter of speculation. It is probably, however, associated with the life history of the organism causing typhoid. From experiments recently made I hope to prove to you that the vitality and multiplication of the bacillus are influenced by the increase of temperature on the soil. With an increased temperature in the earth we get the bacilli much more active.

While sex does not seem to influence typhoid, age has a very marked power in individuals in enabling them to resist the infection. The disease is most frequent in youth and adolescence.

No race or class of people are free from the disease. The negroes in America are no less susceptible than the European living there. Typhoid is not a disease of the poor. Princes and people are alike affected. Dr. Norman Moore has told us, from the memoranda left by Dr. Mayerne, physician to James I., he is satisfied that Henry, Prince of Wales, died in 1612 of enteric fever. In 1862 the British nation was shocked to hear the news that Prince Albert had been claimed as a victim of typhoid, and ten years later the news went abroad that the present Prince of Wales was stricken down, but, fortunately, in this case recovery resulted.

Since the days typhoid fever was differentiated from other infectious diseases many theories have been advanced as to the true cause of this disease. Little doubt now exists as to the disease being produced by Eberth or Gaffky's bacillus. The bacillus is found in every case of typhoid fever and can be easily isolated, although experiments have failed to reproduce the disease in lower animals. Murchison advanced the theory that typhoid fever could arise *de novo*, but if typhoid fever is a specific disease, due to a specific poison, then it is just as impossible for this disease to originate without an antecedent one as would, say, a case of smallpox or cholera. Bacillus Typhi Abdominalis was demonstrated by Eberth in 1880, and Gaffky obtained pure cultures of it in 1884. It is found in the liver, spleen, and other glands, but very rarely in the blood. It is chiefly found, however, in the alvine discharges of the sick, and, contrary to popular opinion, it is found in the saliva and urine. The presence of the bacillus in the urine is of the greatest importance to those engaged in nursing typhoid patients and to public health boards.

Dr. Petruschky, Director of Bacteriological Institute, Dantzig, quotes a case where a sister of the ward accidentally drank a small quantity of urine which had been passed by a typhoid patient in a wineglass, and after an incubation period of 12 days she developed typhoid fever.

The bacillus grows readily at ordinary room temperatures, in any of the usual culture media—milk, agar, potatoes, or bouillon—if, however, this temperature is raised to 37° C. the growth is exceedingly rapid. Klein estimated that if 15 drops of water polluted with these bacilli were added to a cupful of beef-tea the germ population would be, in 24 hours, 80,000,000. While it is capable of withstanding the ordinary temperature of the atmosphere, a temperature of 60° C. will effectually destroy it.

Experiments at the British Institute of Preventive Medicine, by Lunt, proved its vitality in distilled water after 76 days, but it is questionable if it will live so long in the presence of other water bacteria. Kraus was unable to find any typhoid bacilli in water after seven days. In the soil, however, as I shall show you, the bacilli are capable of multiplying for a very long time—nearly 12 months—provided they are supplied with a sufficient amount of organic matter. The typhoid bacillus has been frequently inoculated into the lower animals, but so far experimenters have failed to produce the disease typhoid fever. Since the specificity of typhoid has been demonstrated, scientists have turned their attention to the study of the life history of the bacillus.

That some localities are more favourable than others for the development of this specific organism is very evident from the annual recurrence of typhoid in particular districts. In most Australasian cities typhoid is an annual visitor; it comes in December, and leaves in June, as near as possible; but what are the influences at work during the winter months which diminish the prevalence of the disease? We shall see from the experiments I am about to relate; they have to do with the vitality and multiplication of the bacillus itself.

We shall find in winter their growth is stopped because the temperature is not favourable, and as soon as summer comes around they will spring into activity again. The question of locality leads to the assumption that the soil had also something to do with the life history of the bacillus, but what the exact conditions of soil are that favour the prevalence of typhoid fever is more or less a matter of conjecture. It is only

recently that experiments have been undertaken by the Local Government Board of England and others to "study how far conditions of soil are concerned in enhancing or in controlling the operations and properties of the enteric fever bacillus." Dr. Sydney Martin, who undertook the work for the Local Government Board, made two sets of experiments—one with soil highly polluted with organic matter, the other with virgin, or non-polluted soil.

The method adopted was, having sterilised this, which he got from the entourage of houses repeatedly invaded by enteric organically polluted soil, he placed it in two Erlenmeyer flasks about 3 in. in diameter. The soil was moistened to the extent of 35.1 grammes per cent. Experiment I.—He then inoculated the soil in the centre with a culture of typhoid bacillus and incubated it at a temperature of 37° C. At the end of 16 days he examined the soil, and found in that short time the bacilli had extended from the centre of the soil to the periphery.

Continuing these experiments he has been able to detect living typhoid germs as long as 268 days after inoculation of the soil. He then tried the effect of temperature and daylight on the growth and movement of the bacilli. Experiment II.—Having inoculated a similar soil as in Experiment I, he allowed the culture to grow at the ordinary temperature of the room, 15°-19° C., and exposed to diffused daylight. In this experiment he found the bacilli alive and active at the end of 63 days, and had begun to pervade the soil.

But even at this length of time the growth had not extended to the periphery of the soil as it had done in the soil in 16 days when kept at a temperature of 37° C.

It is very evident that a temperature of 37° C. is more favourable to the growth and activity of these bacilli than is the ordinary temperature of the atmosphere, 15°-19° C.

Dr. Martin then proceeded to make the second set of experiments with "virgin" soil. This soil was obtained from a spot in Hampshire—away from human habitation and had never been cultivated or manured. The nature of this soil was of two kinds: (1) A subsoil consisting of a mixture of peat and sand, locally called "rust;" (2) a lower strata composed of red sandy material. Having sterilised them he incubated them with the typhoid culture, as he had done in the other experiments, including one at a temperature of 37° C., the other at the temperature of the laboratory 15° to 19° C. Examinations were made at the end of 14, 20 and 23 days after inoculation, and it was found there was not only no spreading of the bacilli from the centre to the periphery of the soil, but the bacilli had actually died. This was indeed a striking contrast to what took place with the organically-polluted soils. Dr. Martin sums up his interesting report by saying that "only sterile soil has been employed, and on a comparatively small scale, it is evidently of importance to ascertain the effect on the growth of the typhoid bacillus of any co-existing micro-organism in the soil." This suggests that experiments will require to be made in the soil under the conditions we generally see in the natural state of affairs. Here the experiments of Drs. Robertson and Maitland Gibson are of the greatest interest and importance, as they were performed under normal conditions. These experimenters made inoculations of typhoid culture in patches of soil in a field. The character of this soil was: On the surface 8 in. clayey loam, stratum of sand and clay 10 in. thick, and below this a thick layer of stiff yellow boulder clay. The field had not been manured for 10 years.

They took three patches, which we number 1, 2, and 3. On May 30th, 1896, the turf was removed and nothing allowed to grow on the patches.

On this date they inoculated No. 1 by drenching the surface with 1½ gallons of water containing 200 C.C.m. of typhoid bouillon culture 24 hours old.

No. 2 had 9 in. and No. 3 18 in. of soil removed before they received a similar quantity of culture. The soil was then gently replaced. On August 26th, after 88 days, samples were taken from these patches, and in every one of them the bacillus typhosus was found.

Between May 30th and August 26th the weather had been bright and warm.

On October 20th, 143 days after the inoculation of the soil, they took more samples and got the same results, the weather between August 26th and October 20th being wet and dull.

On November 27th, 181 days after the inoculation, a third series of samples were taken and examined, but no bacilli could be found. The weather between October 20th and November 27th had been wet and cold.

These experiments show that the bacilli went on growing for at least 143 days during the warm weather, but with the return of the cold weather, when the soil was left untreated, the bacilli had all disappeared and were not to be discovered by examination. They then made another series of experiments. About August 30th, 1896, they inoculated three other patches, which we number 4, 5 and 6 in an identical manner to Nos. 1, 2 and 3.

On November 27th, 88 days after inoculation, an examination was made, but no bacilli could be found in any of the samples from these patches. During this time the weather had been cold. Nothing more was done till January 17th, 1897, when patches Nos. 4, 5 and 6 received two gallons of very weak beef tea. At fortnightly intervals these three patches continued to receive a solution of organic matter till June 3rd, 1897. During these five months patches Nos. 1, 2 and 3 received no organic matter.

On June 3rd samples were taken from the whole six patches, but only in 4, 5 and 6 were bacilli found.

On July 11th, 316 days after inoculation samples were again taken with the same results. On this date samples were also taken at 6 in. below the surface in Nos. 2, 3, 5 and 6. In samples from 2 and 3 no bacilli were found, but in those from 5 and 6 the typhoid organism was present.

What then do these experiments prove?

1. That the typhoid bacillus is capable of retaining its vitality or multiplying to an enormous extent in certain soils contaminated with organic matter. In Dr. Martin's case he found it after 268 days, while Dr. Robertson's experiments show that it may live (315 days) through the cold of winter, to spring into activity again in summer, provided sufficient nourishment is supplied in the form of organic matter. This organic matter may be supplied, as was done in Dr. Robertson's cases, by beef tea, but leaky drains, midden privies, nightsoil buried in gardens where vegetation is not active, will also supply the necessary organic matter.

2. That the typhoid bacillus placed in the earth is capable of invading the surrounding soil and also of coming to the surface. In Dr. Robertson's experiments bacillus planted at 18 inches came to the surface, and inoculations made on the surface grew downwards three inches. In Dr. Martin's the bacilli readily invaded the soil when incubated, but much more slowly when cultivated at the ordinary temperature.

3. That the organism grows best in a moist porous soil (35 grammes per cent.) at a temperature of 37° C. (F. 103°), a temperature frequently reached in the Australias, but also it is capable of retaining its vitality at ordinary temperature.

4. Sunlight and vegetation were also shown to be inimical to the bacillus, only where the sunlight was direct and only when the vegetation was active.

In these experiments we can see why typhoid fever should be more prevalent in summer than in winter, the bacillus being active in summer, and dormant during the cold weather.

The conditions then which favour this growth and spread of typhoid bacillus are—(1) Moist porous soils polluted with organic matter; (2) High temperature, such as we get in the summer season. On the other hand a pure dry soil, low temperature such as we get in the winter months, direct sunlight and vegetation are inimical to its growth and vitality. There can be little doubt that, as Sir Charles Cameron remarks, "A filth-laden soil forms a good nidus for the bacilli of typhoid."

Local boards of health will do well to avoid polluting soil by allowing the burying of nightsoil and other garbage in yards and gardens of small size, unless very active vegetation is going on. The disposal of the household slops and other liquid refuse by surface gutterage, leads, sooner or later, to soil pollution. It is admitted that the soil is a great purifier, but its assimilative power is limited. The most ardent advocate of the earth system will tell you that unless there is tillage of this land and active vegetation carried on there is great danger from pollution of soil. It is, however, not only in the soil where this bacillus can live and grow, for, as Lindwurm remarks, "What the soil is on a large scale, the same on a small scale are also the floors of rooms, the walls of houses, the drains of privies and the like. Just as it matures, at some depth in the ground, so also may the typhoid germ obtain the necessary conditions for its growth in a seam or a cleft in the flooring of a room, or in the loosened mortar and sand between stones and slabs."

Having seen the conditions which favour the growth of the bacillus, let us consider the channels by which the infection may enter our system.

1. Inhalation—by the air we breathe.
2. Food—including milk, meat, oysters, raw vegetables, and fruits.
3. Water—including lemonade, cordials, and ice-creams.

While there is no doubt of the virus being given off in the excretions, it is questionable whether typhoid is infectious in the popular sense—that is, through the breath.

Dr. Budd, Sir William Jenner, Professor Corfield, and many authorities in France hold that it is. Against this we have the experience of hospitals.

Water.—The recent epidemics at Maidstone and Adelaide show the urgent necessity of keeping the water supplies free from contamination. Water may be tainted either at its source, storage or distribution.

Perhaps nothing contributes so much to contamination of water supply as the intermittent system.

In the case of leaky pipes, when the pressure is reduced contaminated matter from the soil may be drawn into the pipes and thus distributed to the household for drinking or culinary purposes.

It is, however, very important to remember that it is not necessary that intermission should take place in the pressure in the pipes. The late Mr. Spear, in a report which he drew up concerning an outbreak of typhoid in the Mountain Ash district, laid it down

that such intermissions "are not by any means essential to the introduction of foreign matter into water pipes. Under various physical conditions very powerful insucon of external matter into a full flowing water pipe can take place."

What may be a source of infection in connection with a water distribution is the system of surface fire-plugs placed along the streets, if not in the gutters, very close to the side channels.

It must not be thought because water has been analysed and declared potable that it is not potent for mischief. As an instance of this I may quote what happened at Houghton-le-Spring about 10 years ago. An epidemic of typhoid occurred there, and the evidence showed, on inquiry being made, that the water had been polluted by filth, which had travelled three-quarters of a mile. A sample of this water was examined by the analyst and declared to be "a good water for drinking." The chemists and the bacteriologist will require to work together, for while the chemist would overlook specific organisms if the water was potable, the bacteriologist would be certain to find them, hence in suspected water—even if the analyst's evidence is that the water is pure—a bacteriological investigation should be made for the bacillus typhosus.

Milk as vehicle for the conveyance of the typhoid bacillus is now well known. Numerous epidemics have been traced to the milk supply—the most recent being that at Clifton, where 94 per cent. of all the cases were supplied from the suspected source. It is very questionable—nay, at present considered highly improbable—that the milk may be infected through some disease in the cow, as happens in scarlet fever.

It is generally held—where there has been a suspicion of this—that the infective matter has got on to the udder of the cow and thus gained entrance to the milk during the process of milking. It is right to say that Dr. Allen, who has had a large experience in Africa, has expressed his conviction that typhoid may be caused in this way.

Food.—In mentioning the important channels of infection we must not forget the ever-accumulating evidence that many cases are due to the eating of oysters which have been sewage polluted.

In the Old Country many instances have occurred lately where the infection has been conveyed through these molluscs. In fact the matter has become so serious that a deputation waited on the President of the Local Government Board in April last requesting him to bring about legislation to control this source of danger.

It was stated by Dr. Niven, M.O.H., Manchester, that 10 per cent. of typhoid cases in that city was caused by eating oysters. Dr. Newsholme, M.O.H., Brighton, stated that he had ascertained that oysters were responsible for one out of every three deaths from typhoid in that district.

The danger, as was pointed out, is all the greater because the dainty bivalve may be swarming with typhoid bacilli, and yet look perfectly sound.

The practice of eating all uncooked vegetables such as tomatoes, watercresses, lettuce, etc., which come in contact with the soil is one of danger. Lastly, let me say a word about ice creams. In Liverpool, during the year 1897, an outbreak of typhoid fever occurred. After every inquiry it was found that 27 children were affected, and it was admitted by 25 of them that they had eaten ice cream sold by an Italian. The other two were believed to have eaten chipped potatoes from the same vendor. At the time the ice cream was manufactured a case of typhoid existed at the Italian's house.

In cities with surface gutterage, with all household and bedroom slops, probably containing not only the germs of typhoid, but of other diseases, is it to be wondered at that in the dry, hot weather, with incomplete flushing of side channels, that the seeds of disease are spread over food, and may even be swallowed? Further, the part which flies play in the carrying of infection in pan-system cities is not to be lost sight of. An epidemic in Alexandria was supposed by Surgeon-General Jameson to have been aggravated very much by flies infecting food.

Preventing the Origin and Spread of Typhoid Fever.—If typhoid is a preventable disease, we may be asked, why don't we prevent it? In order to do that, however, many things are necessary. Unfortunately all that is necessary is difficult to obtain. But we can do something to prevent its spread, and a fact of primary importance is the early recognition of the disease. Isolation of the sick, disinfection of all the excreta, clothing, house, etc.

The importance of an early diagnosis of the case is certainly a plea for the establishment of a bacteriological laboratory. Medical men should have facilities afforded them to take advantage of Widal's test, which can only be carried out under special circumstances. Our hope in preventing the disease is getting cases early and in the destruction of the bacilli in the discharges.

The most effectual way to destroy the excreta is by burning. If the excretions cannot be burned then a thorough disinfection of them is imperative, and here lies the great responsibility of nurses and others who are engaged in the care and treatment of typhoid patients. The destruction of the bacilli in this way is, as well said, "guarding the first line of defence against the ubiquitous and destructive enemy."

Two years ago the Local Board of Health, Hobart, inaugurated a separate pan system for typhoid excreta, and besides the disinfection at the house, it is again disinfected by the men of the sanitary department before being buried. But old customs are hard to break down, and in many instances the garden is still made the receptacle of the excreta, only enough being put in the pan to avert the suspicion of the sanitary officers. After the recovery of the patient the room should be thoroughly cleansed, the floors and skirting boards washed with disinfectant solution. The room may be fumigated, so also bedding and other material which cannot be boiled.

Preventing the Origin.—While the physician, the nurse, and the public health officers may all do something towards preventing the spread of the disease, there remains what is equally important to be done, namely, to prevent it at its origin. If we would rid ourselves of this enemy it is all important to see that our water supply is beyond suspicion. There should be no possibility of its being polluted either at its source, storage, or periphery. Leaky pipes are to be got rid of, so that if pressure in the main is reduced no insinuation of foul matter from the soil may take place. Fire plugs should be guarded against pollution and raised above the surface level of the street and protected in some way from the dust. Every care should be taken in laying down new pipes to see that they are not fouled by the surrounding soil—this is equally important in doing repairs. The men who attend to the repairing of water pipes or laying new pipes should not attend to laying of drains and other sewage works unless they are particularly careful to have thoroughly cleansed themselves and changed their clothing.

In the matter of milk every effort should be made to see that our milk supply is as pure as possible. Regular

and efficient inspection of dairies is absolutely necessary, and central boards of health should see that this is carried out not only in the city but country dairies as well. From whatever source obtained milk—as well as water—should be boiled before use. In spite, however, of oft-repeated warnings there is but a small percentage of people who drink boiled milk.

Fruit, uncooked vegetables, watercresses, lettuce, etc., should be thoroughly cleansed with clean, pure water before being eaten.

The importance of having oysters stored in clean water where pollution is impossible is self-evident.

I have now shown you the vehicles by which the typhoid poison is conveyed to the individual, and how it may be interdicted and rendered innocuous; but something more is needed—we must prevent the multiplication of the bacillus. The conditions which are best suited for the development of the micro-organism have already been considered, but what are the circumstances under which the bacillus will not grow, because if we can bring about such conditions, then we can reasonably hope to starve this organism out of existence? We must therefore have:

1. Careful selection of building sites, with good ventilation and plenty of sunlight in our dwellings.
2. Subsoil drainage to remove all dampness.
3. Paving of all yards to prevent exhalations and soakage.
4. Active cultivation in gardens to keep the soil pure.
5. Removal of all garbage and destruction of same.
6. A proper system of drainage to carry away all waste product.

It is a matter of regret that more attention is not paid to the sites on which dwellings are erected. Most of you know, in your own experience, that houses are occasionally built on sites which are totally unfit for dwelling places. No greater source of danger could arise than living in houses which have been constructed on made-up soils, composed principally of all sorts of refuse of the city, and used most frequently to fill up swamps. Local Boards of Health should, before granting permission to build dwelling houses, satisfy themselves that the sites are suitable ones. If the soil on which a house is built is polluted, then the inmates are exposed to the risk of all sorts of foul air which permeates the house under such conditions.

Ventilation must be efficient and sunlight admitted, as it is well known pure air and sunlight are inimical to the life of the typhoid germ. The subsoil should be thoroughly dried by draining.

The paving of all yards with some impervious material is highly desirable, or more especially where yards are small, soakage around the walls of the house should be prevented. Where gardens exist active cultivation is to be encouraged, for, as well said by the great authority on rural hygiene, Dr. Vivian Poore, "There can be no purity of soil without tillage." It may be said generally that cleanliness is absolutely essential inside and outside the house, for typhoid is pre-eminently a filth disease. The dust within is as liable to keep the bacillus alive as the organic filth without. It is very necessary that all organic matter, such as household garbage, etc., should be removed, and that no accumulations should be allowed to remain around the premises.

What is required most of all, however, is a proper system of drainage to carry away all waste products as quickly as possible. The pan system and the surface gutterage which now exists must obviously tend to produce those very conditions of soil which we have

seen favour the vitality and multiplication of the typhoid bacillus. It may be argued that drains and sewer gas have been the means of spreading typhoid fever, but this is very doubtful. In a series of experiments made by Dr. Andrews and Mr. Parry Lawes on behalf of the London County Council, it was found that sewer air had fewer micro-organisms in it than the outside air, and they were unable to find either the bacillus of typhoid or diphtheria.

There can be no question that sewers do sometimes give off most offensive emanations, but it is more likely these emanations act by lowering the constitutional resistance rather than by conveying the specific poison. With a properly constructed system of sewers, well ventilated and trapped, we need not fear about sewer gas. Experiments in the lower animals by Dr. Alessi have shown that the keeping of animals, rabbits, mice, etc., over open sewers renders them much more liable to the typhoid infection when inoculated with the typhoid germs.

Whether sewer gas does convey typhoid germs or not, one fact is perfectly plain that the prevalence of typhoid fever has diminished in every city or town where underground sewerage has been established. Nevertheless, it is advisable to prevent the accumulation of sewer gas and its admittance into houses, for even if it be innocuous, it is nevertheless a nuisance, and ought to be got rid of.

The effect of underground drainage on the prevalence of typhoid fever and its death-rate is well shown by the figures and charts now produced. In England, there has been underground drainage, generally speaking, for one half a century; but of late years the system has been much improved in the way of ventilation, trapping, etc.

In 1869, the deaths from typhoid fever were taken by the Registrar-General of England from amongst fevers and classified as a separate disease.

The following table shows the diminution in the death-rate of typhoid fever since that year in England and Wales, with improved drainage:—

ENGLAND AND WALES.

Years.	Death Rate.*
1869	3·9
1870	3·8
1871-1875... ..	3·7
1876-1880... ..	2·7
1881-1885... ..	2·1
1886-1890... ..	1·7
1891-1897... ..	1·7

*Average annual death-rate of typhoid fever per 10,000 living.

The effect of sanitary work on reducing the death-rate of typhoid in England and Wales was well brought out in a report by the late Sir George Buchanan, medical officer of the Local Government Board. He took 25 towns in which such works had been carried out, and showed that in nine there was a reduction exceeding 50 per cent. in typhoid cases, and in 10 others a reduction between 33 and 50 per cent. Following up this report I have taken three important towns—Cardiff, Leicester, and Bristol—where the work was just then completed, but where the drainage system has since been perfected. The death-rate from typhoid was as follows per 10,000 persons living:—

TYPHOID FEVER—DEATH-RATE PER 10,000 LIVING.

Period of Years.	1847-54.	1859-66.	1884-88.
Cardiff... ..	17·5	10·5	4·0
Leicester	14·5	7·7	2·2
Bristol... ..	10·5	6·5	1·4

Leaving England, let us see the effect of drainage on the typhoid death-rate in a continental city—Munich—which has a population of over 400,000.

This table will show the effect of drainage on the typhoid fever death-rate more markedly than even the English statistics:—

CITY OF MUNICH (400,000 POPULATION).

Years.	Death-rate.*
1851-1860	20·2
1861-1870	14·7
1871-1880	11·6
1881-1890	1·6
1891-1895	0·5
1896	0·3

*Average annual death-rate from typhoid fever per 10,000 living.

Munich was a cesspit city till 1858; then all cesspits were made water-tight. From 1858 to 1878 the soil was still polluted with household slops. In 1878 drainage was started, and since then the city has been gradually sewered, and water-closets have replaced the water-tight cesspits.

Now, let us look at Sydney with its sewerage system, and compare it with Hobart with its pan system and surface drainage for the past 10 years. Hobart is in a better position than Sydney naturally, with a temperature much lower, much better facilities for draining, and with a climate more favourable to health. Yet we find that taking typhoid death-rate for the two cities the returns are as follow per 10,000 persons:—

	Sydney.	Hobart.
1886	9·0	3·0
1887	5·8	22·0
1888	5·1	11·8
1889	5·5	12·8
1890	3·6	5·1
1891	2·8	16·7
1892	1·9	5·7
1893	1·8	2·5
1894	2·9	4·8
1895	1·9	5·8

So you see, since Sydney has been drained, the typhoid rate has become gradually reduced from 9·0 to 1·9. In Hobart it has been floating up and down without any tendency to decrease.

It is not, however, only in the special cities which I have given you full particulars of that we find a reduction of typhoid fever death-rate. In a large number of cities in England, America, and on the Continent of Europe, including Munich, Dantzic, Frankfurt, Breslau, Hamburg, Berlin, Brussels, London, 28 English cities, New York, Brooklyn, and Vienna, which are sewered, I find the average death-rate during the years 1880-1884, inclusive, was 2·4 per 10,000 living. In a number of other cities (including Paris, Marseilles, Turin, Naples 1881-1884, Palermo 1881-1884, Cantania, 281 cities in Italy, St. Petersburg 1883-1884, Riga 1881-1882, Budapest 1887 to 1881, 20 German cities 1878 to 1882, New Orleans, Baltimore, Cincinnati, without or imperfect sewers, the average rate was 10·0 per 10,000 living, or more than four times the rate in sewered cities.

In spite of these figures there are some who continue to argue that underground drainage will not be the means of eradicating typhoid, and further that there are cities even within the boundaries of the Australian Continent which have surface drainage, a pan system, and an immunity from typhoid fever. Ballarat has been cited as the one city which in itself proves the truth of this assertion.

Now, I have taken the following figures from the health reports of Victoria:—In 1892, 1893, and 1894 there were reported in the city of Ballarat, with a population of 23,199, 55, 58, and 125 cases of typhoid in these respective years.

It is, indeed, pleasing to find that the pan system and surface gutterage have very few advocates at the present day where it is possible to get a water carriage system.

The relation between the several systems of the disposal of excreta and the prevalence of typhoid fever has often been the subject of inquiry, but owing to the dissimilarity of other conditions of popularity adopting the different methods, it has been difficult to arrive at any satisfactory conclusion. A recent report by the Health Officer of Nottingham on this subject is, therefore, of the greatest interest and importance. In Nottingham, while other conditions are uniform, there are three classes of houses, namely, those with (1) midden privies, (2) pans, and (3) water-closets. The Health Officer takes the average number of cases for term 1887 to 1896, and he reports as follows:—There was one case of typhoid per annum for every 37 houses with midden privies; one in every 120 houses where pans were used; and only one in 550 houses provided with water-closets. Many of the first group are stated to be houses of good character, while the water-closets are by no means confined to superior neighbourhoods.

Such a report as that, with other facts already given, must convince the warmest advocate that the water carriage system, as far as the prevalence of typhoid fever is concerned, has everything to recommend it.

There are three objections which have been urged against the metropolitan drainage scheme:

1. It will cost too much money.
2. If the outlet be at Macquarie Point the River Derwent will be polluted, and the health and comfort of the residents of Sandy Bay and Lower Queenborough will be interfered with.
3. The water supply is insufficient.

Dr. Sprott then dealt with the objections, showing the cost was not likely to be more than the citizens were paying now for the sanitary service if the engineer's estimates were correct.

River Pollution.—The second objection raised is the method by which the Board propose to dispose of the sewage. He was, however, satisfied to take the opinion of Mr. Napier Bell, who stated emphatically no pollution of the Derwent would result.

Should it be found, however, that the river has become polluted by the discharge of the sewage, it will be quite competent for the Board to have the sewage purified, so that the fluid discharged into the river would be quite innocuous. Recently the bacteriological treatment has found much favour in England, and such a process has been adopted at Exeter and Sutton, in England, and certainly by the time our works are completed we shall have more experience of the different processes and better able to adopt the most modern method of treating the sewage if so required.

Insufficient Water Supply.—There can be no doubt that a drainage system without a sufficient water supply would be a very dangerous institution to establish in our midst. In looking into this objection one has naturally to ask themselves, "How much water have we, and how does that amount compare with other cities and towns?" I find that in April, 1896, the Director of Waterworks reported that the population supplied by Hobart waterworks as 31,500, the daily consumption of water as 2,000,000 gallons, giving 63 gallons per head per day.

At that time he reported 200,000 gallons was accounted for by leakage, or illegal use—a quantity which would, if conserved, give 6½ gallons to each person for water-closet flushing. It is right to state that the Director of Waterworks informs me that during the first three months of this year, the driest

we have had for 25 years, I believe, the amount supplied was not less than 50 gallons per head.

Now, I say if we have 50 gallons per day in the driest season we have sufficient. I have looked into some other cities, and I find Sydney has been able to carry on a sewerage system with an amount averaging during the nine years of the existence of the Drainage Board of between 32 and 42 gallons per head. As to the water supply of several other great cities, I may mention that at Munich the supply to the population is 33 gallons per head per day; at Brisbane, 33; London, 28; Liverpool, 19; Southampton, 35; Sheffield, 20; Edinburgh, 35; and Paris, 31; and 72 English and Scotch towns average 26·7 gallons per head of the population, including factories. At Glasgow, the best drained city in the world, and managed on the most modern up-to-date principles, with an unlimited supply of water, they never exceed 50 gallons of water per head, and there they have closets in every house. In the very driest season we never have had less than Sydney. I shall be told that so much water is used for irrigation in Hobart; well, I say the greater shame that people should so use the water if there be not enough for health purposes. The Board have decided, however, there is enough. The Engineer says there is enough. The Director of Waterworks, who is also the Sanitary Engineer of the city, advises the Municipal Council to carry out this work of drainage in the event of nothing being settled by the Metropolitan Board. He surely would not suggest this if he thought there was not enough water.

I contend, therefore, that not one of the objections can be sustained against the drainage scheme.

In dealing thus with the question of typhoid fever and how it may be prevented, I have only dealt with the principles. The carrying out of these principles is a matter that must be dealt with by the Central and Local Boards of Health, assisted by our engineers, architects, and builders. The householder and the individual must each and all assist, and those who will not must be compelled, for no private interest must be permitted to interfere with the health of the people, for, indeed, the health of the people is the wealth of the nation.

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THE NEW SOUTH WALES LAGER BEER BREWING COMPANY.—The F. F. Brewery in Barmen, Germany, was awarded first prize and gold medal over all the German beers exhibited at the Brewing Exposition at Rameisheid in June, 1898. The plant used by the N.S.W. Lager Beer Brewing Co. is in every detail a similar plant.

PROCEEDINGS OF BRANCHES.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting, held at the University on September 29th, 1898.

Present: The President (Dr. Swift), Drs. Lendon, Marten, J. C. Verco, W. A. Verco, A. E. Wigg, J. A. G. Hamilton, Symons, Poulton, Evans, Gregerson, Michie, H. M. Evans, G. C. Hayward, A. A. Hamilton, Gault, Fischer, T. K. Hamilton, Professor Watson, and the Secretary (Dr. W. T. Hayward).

LIVING EXHIBITS.

Dr. R. HUMPHRY MARTEN exhibited a boy, *æt.* 17 years, who for the last seven years had had a persistent mucous discharge from two small orifices symmetrically placed along the anterior borders of the sterno-mastoid muscles, about one and a-half inches above the claviculo-sternal articulations. A fine probe could be passed upwards and backwards along the fistulae for two inches. The openings exactly corresponded to the lowest orifices in cases of persistent bronchial fistulae as depicted in Bland Sutton's work on "Tumours, Innocent and Malignant," and Dr. Marten thought that there was very little doubt but that this was their nature. They always discharged more during a meal, or with violent exertion. Dr. Marten did not propose to interfere with them.

PATHOLOGICAL SPECIMENS.

Professor WATSON showed:—

1. Tubal abortion successfully removed from a two-para. The tube is an inch in diameter, and filled with blood-clot. Its abdominal ostium, whence the ovum doubtless escaped, is now plugged with partially extruded clot.

2. Hæmatosalpinx of left tube with adherent sclero-cystic ovary, from a girl, *æt.* 19, who, eighteen months previously, was operated on in the Adelaide Hospital for a displaced uterus and an inflamed ovary. A sinus which remained after the operation was traced by posterior colpotomy into a matted mass in the floor of the pelvis, this mass on digital examination proving to be adherent bowel and right uterine cornu. The abdomen was opened, and a dense adhesion of small intestine was dissected off the site of a scar of the fundus (source unknown, perhaps perforation). The cœcum in its turn was freed from the stump of right ovary, which had been removed at the previous operation. The tube which had been left behind was only partially removed on account of the dense adhesions. The uterus was rentro-fixed by coapting the raw area on its fundus to the lower end of the abdominal wound with chromicised tendon. (Dr. Way.)

3. Large parovarian cyst, with tough walls. The left tube is stretched over it for nearly seven inches. The ovary is recognizable as a fibrotic lump close to inner end of tube. (Dr. Poulton.)

4. Multinodular myoma of corpus uteri (9½ lb.) from a nullipara, *æt.* 49. In this case the cervix was so free and stretched that the uterine arteries were isolated from their veins and secured early in the operation. The ovarian vessels were left till the last. This accounts for the exsanguinous condition of the specimen, and the absence of ponded venous blood during the operation. There was no shock or other disquieting factor to retard convalescence. (Dr. Way.)

5. Globular myoma of corpus uteri (2½ lb.) from a maiden lady, *æt.* 41, who suffered from palpitation, and

was much weakened by oft-recurring metrorrhagia and pain. Although the ether and the anæstheticist were the best obtainable in Australia, the patient died on the table without a struggle five minutes after the mask had been removed, and just as the last superficial horsehair suture was being placed in the skin. The coroner, jury, and expert favoured the theory of pulmonary oedema, due to the anæsthetic used. (Dr. Way.)

The three following specimens are interesting as illustrating the fact that it is not always possible to remove a myomatous uterus by the method of Freund (ligation of the broad ligaments from above downwards), or to enucleate a tumour, cystic or otherwise, without a complementary hysterectomy. They also exemplify the resourcefulness of the operators.

6. Soft trilobate rapidly growing oedematous fibroid of the supra-vaginal cervix from a woman, *æt.* 40, worn out by profuse hæmorrhage and bladder trouble. It weighed 10½ lb., and had completely effaced the left broad ligament, encroached on the meso-sigmoid, and pushed the utero-vesical fold of peritoneum up to the umbilicus, dragging the bladder with it, and reducing the holding capacity of that viscus to *nil*. The unfinished section of the broad ligament between two ligatures, at the left uterine cornu, marks the spot where further progress in that direction was blocked by the neck of an intra-ligamentous development which lay between the operator and the uterine vessels and ureter of that side. The mass in front, like the bald head of an old man, shows the perilous position which the bladder (which covered it like a cow) must have occupied in an operation performed from above downwards. Finally the clip-mark just outside the right ovary on the infundibulo-pelvic ligament, shows the final determination of the operator to attack the tumour from the easier side and from behind, thereby rolling the immense mass off the bladder and away from the ureters, and removing it with ease and safety. (Dr. O'Sullivan.)

7. Rapidly growing semi-solid downgrowth of left ovary into broad ligament, accompanied by a stony fibroid of supra-vaginal cervix the size of an orange, from a nullipara long past the menopause. Here, as in the previous specimen, the unfinished section of the broad ligament between two ligatures at the left uterine cornu show where the operator first realised the impossibility of commanding the hæmorrhage, or pediculating the tumour in the midst of soft new growth. The imprint of a strong clip on the right infundibulo pelvic fold shows where the utero-ovarian arterial circuit was commanded while the operator preluded his ovariectomy by a complementary hysterectomy from right to left, and finished the operation with safety and ease. (Dr. Way.)

8. Normal-sized uterus with suppurating ovarian hydrocele of the right side. The incomplete section of the broad ligament between two ligatures on the uterine side of the cyst shows where the operator realised the danger of proceeding further in that direction, and also where the cyst ruptured and discharged its purulent contents into the pelvic cavity. The specimen, however, fails to show the appalling hæmorrhage, nor the counterbalancing intravenous transfusion of hot saline solution and auto-infusion by Es-march's bandage, which saved the patient's life. The telltale tractor clip-marks on the pelvic pole of right ovary point to the path of the surgeon across the vaginal vault as the only means of removing the cyst of the opposite (right) side, and applying per vaginam drainage to the peritoneal cavity, soiled by the purulent contents of the cyst. The patient made a satisfactory recovery. (Dr. Way.)

9. Uterus and adnexa, removed by Doyen's vaginal method from a woman, *æ*t. 28, with puerperal sepsis, and a temperature ranging from 100° to 107°! The operation was followed by hardly any shock, and patient is convalescent—twenty-third day. (Dr. Way.)

10. Burrowing form of hydatid from the gluteal muscles of a man, *æ*t. 45, from whom, seven years previously, a hydatid of the same region had been removed. Some opaque dead vesicles were found in the muscle outside the tough-walled capsule containing the packed nest of vesicles. (Dr. Way.)

11. Burrowing form of hydatid, growing from the left lobe of the liver, but presenting to the right of the middle line. The capsule was very tough and apparently nowhere ruptured, yet the anterior surface of stomach was noticed at the operation to be grafted with minute vesicles. Some gelatinous shreds probably represented the remains of a defunct mother cyst obscured by the number of pin-head- to walnut-sized vesicles. From a woman, *æ*t. 30. (Dr. Way.)

12. Hydatid cyst with its capsule dissected from behind the adductor longus muscle of a girl, *æ*t. 18, who dated its growth from an injury in lifting a tub a year previously. The wound was sealed without a drain, and healed at once. Through the kindness of Dr. Swift I was enabled to examine (within a week of seeing this case) another exactly similar one in a man, *æ*t. 50, who said he had sprained the thigh muscles while shoeing a heavy horse. (Dr. Evans.)

13. Hydatid cyst without its capsule, which was left behind in the right rectus muscle, and subsequently suppurated, from a girl, *æ*t. 16, who was operated on a week before the other girl, but left her bed a week after her. This seems to point to the wisdom of removing the capsule where not too difficult a dissection is required. (Dr. Way.)

14. Date-stone hawked up by a gentleman, *æ*t. 40, who remembered having had one in his mouth while hurrying to catch a train four months previously. Dr. Jay thought it came from the Eustachian tube. Dr. Fischer, the specialist, located its hiding-place in the supra-tonsillar fossa, while I thought it had been lodged in a deep Rosenmueller's fossa. (Dr. Jay.)

15. Skull showing the position of the opening made at Dr. Fischer's instigation to remove part of the gasserian ganglion in a lady in whom the first division was purposely left behind six months ago, and who finds life bearable. (Dr. Fischer.)

16. Vesical calculi from two old men, one of whom has gone off his head since the operation. (Dr. Way.)

17. Skull of an aboriginal woman, picked up on the beach. It shows widespread syphilitic caries. (Medical student.)

18. Heart of a cat, transfixed by a spicula of window-glass. There was no sign of external hæmorrhage, and the cause of death remained a mystery till a friend of the owner conceived the happy idea of holding an inquest. A broken pane in the conservatory supplied the clue. (Medical student.)

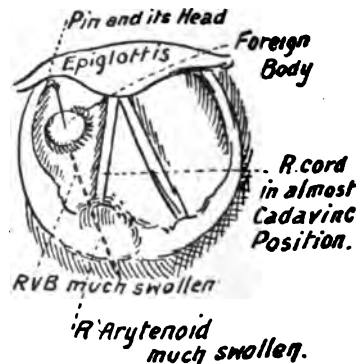
19. Thickened appendix, the size of an adult thumb. It has a perforation into its own canal, *e.g.*, its proximal portion opens into its distal portion. From a man *æ*t. 56, still under treatment. (Dr. J. A. G. Hamilton.)

20. Thickened kinked appendix from a woman, *æ*t. 28, in process of satisfactory recovery, on whom Dr. Hamilton utilized the anaesthesia to amputate her cervix and ventro-fix her uterus. (Dr. J. A. G. Hamilton.)

21. Series of photographs illustrating the various steps in Doyen's methods of vaginal and abdominal hysterectomy, and his method of removing the gasserian

ganglion. These were taken from life for demonstration purposes at the late Moscow Congress.

Dr. FISCHER showed a foreign body consisting of a large pepper corn transfixed by a pin, which he had removed from the glottis of a boy, *æ*t. 12 years, where it had lain apparently quiescent for three and a-half months. The statement of the boy when he came for consultation was that he had been using a pin as a dart in his pea-blower three or four months ago and had swallowed it, so he thought, as the pin did not issue from the tube after blowing. He, however, had suffered no ill effects therefrom, and had forgotten all about it till the day of his seeking advice, when a pricking sensation was felt in the throat, which made him cough frequently, and the boy felt sure the pin was working its way out. On examining the throat, the right ventricular band and right arytenoid were much swollen, and the movements of right cord greatly diminished. Lying on the right ventricular band was a large foreign body like a pea, and sticking out through the foreign body was a small object like a pin. The greater part of the pin ($\frac{1}{4}$ ths) had, therefore, penetrated the right ventricular band and presumably also the posterior part of the trachea, and was hidden from view; it was tightly fixed in its bed. He had had no difficulty or pain in swallowing, and speech was unaffected apparently. After removal of the foreign body the boy made a rapid and complete recovery. The peculiarity about the case is that so irritating a foreign body as a pin could remain so long in the flesh and cause such little local disturbance, there was no sign of any pus formation, and so little reflex trouble.



Dr. T. K. HAMILTON exhibited:—

1. *A Case of Spontaneous Othematoma.*—About a month ago the patient, who was under treatment for double maxillary antrum empyema but otherwise healthy, noticed a swelling of his right auricle. He has had no injury of any kind to the ear. The swelling, which fills up the whole of the space between the helix and antihelix, is soft and semi-fluctuating and seems to have penetrated the cartilage as it can be made to protrude posteriorly likewise. The case is shown as one of comparative interest and rarity inasmuch as it has come on without any apparent cause.

2. *A Case of Pulsating Exophthalmos (L) with Double Ophthalmoplegia Externa and Interna following Severe Injury to the Head.*—W.D., male, aged 36 years, got his head jammed between two trucks on September 6th, 1897. He had hæmorrhage from the nose, mouth, and both ears with proptosis and complete ptosis on both sides after the accident and remained unconscious off and on with severe pain in the

head for three months subsequently. In about a month after the injury the ptosis began to get less marked on the left side and finally disappeared. The vision of this eye also improved from this time.

When seen on August 3rd of this year the following conditions were noted:—

Right Eye.—Complete ptosis and complete paralysis of the inf. sup. and int. recti, the ext. rectus acted well; pupil immobile and obliquely oval up and inwards, measuring 5 x 6 m.m.; slight proptosis; cornea anæsthetic but no anæsthesia of the skin around the orbit. The orbicularis did not act very vigorously but the occipito-frontalis acted normally; $V. = \frac{1}{2} c + 4.50$ D. J. 2; field concentrically contracted for all colours.

Left Eye.—No ptosis; eyeball very prominent; veins of the lids and surrounding skin all dilated but do not pulsate; veins of the eyeball also dilated and chemosis of the lower half of the globe and caruncle which protrudes between the lids; cornea anæsthetic; skin around the orbit of normal sensation; pupil immobile, obliquely oval up and outwards, 4 x 5 m.m.; movements restricted very much in all directions, the wheel movements of the sup. oblique alone remaining; pulsation synchronous with the radial pulse could be obtained on fairly firm pressure but not perceived by the patient himself; no bruit on auscultation, nor did stooping down increase the pulsation or cause any feeling of weight in the part, pressure on the carotid stopped the thrill; the veins of and about the eyelids enlarged but did not pulsate, and there was marked engorgement of the veins of the eyeball with a soft swelling in the upper and inner angle of the orbit; media, except for slight haziness of the cornea, clear; fundus, margins of disc blurred and retinal veins large and tortuous, no hæmorrhages; field, concentrically contracted for all colours. $V. = f. at 5 m. and c + 4.50$ J. 12.

The pupils on both eyes did not dilate *ad maximum* to atropine (7 and 6 m.m. respectively and round) nor did they contract *ad minimum* to eserine.

Nose, naso-pharynx and pharynx normal. Senses of smell and taste perfect. Tongue seems to be protruded slightly to left side. Right side of face somewhat flattened, but the risorius and orbicularis oris act well. Ears, both membrana tympani dull and thickened in places, manubrium of left side drawn back and some deafness of this ear; tinnitus; T.F. best on left side.

Urine normal. Heart also normal but action weak.

On August 9th the common carotid was tied by Dr. Corbin. On September 2nd the patient was allowed to sit up having made an uninterrupted recovery after the operation, and the condition of his left eye had somewhat improved. On September 9th, the operation for ptosis recommended by Hess of Leipzig (Arch. f. Augenheilkunde, Bd. XXVIII, Heft I.) was performed on the right eye and with the most satisfactory results; the stitches were removed on the twelfth day.

The following is the present condition of the eyes:—

Right.—The patient can by throwing the occipito-frontalis into action open the eye comfortably and there is little or no disfigurement; much less anæsthesia of the cornea; pupil less dilated. $V. = \frac{1}{2} c$ partly $c + 5.50$ D. J. 1. Retinoscopy gave $+ 0.50$ D. $\approx + 0.50$ D. ax. 90° but no glass improves for distance.

Left.—Less proptosis, about 4 m.m. now; partial restoration of movements of the eyeball outwards and inwards, 10° and 20° of excursions respectively; chemosis and engorgement of veins of and around the eyeball less; pupil 4.75 m.m. and nearly round; disc less blurred on outer side $V. = \frac{1}{2} c + 5.50$ D. J. 2. Retinoscopy gave $+ 0.50$ D. $\approx + 0.50$ ax. 90°, but no

glass improves for distance in this eye either; field slightly larger especially downwards; all pain around this eye has disappeared.

Such is the record of the case which presents many clinical points of considerable interest. First: As to the nature of the injury and the ocular lesions in connection therewith. It seems pretty clear that the violent lateral compression of the skull must have caused a fracture of the base resulting in communication between the left internal carotid and the cavernous sinus and injury to or compression of the nerves of the eye on both sides. Panas (Arch. d'Ophthal., XIV. p. 474) records the results of experiments made by him on the cadaver with a view of ascertaining how after injury such symptoms are produced. He found by compressing the skull in the temporal regions he could obtain a basal fracture of the middle cerebral fossa which extended towards the sphenoidal fissure and passed through the outer wall of one orbit and under the frontal portion of the sphenoid and optic foramen of the other; the temporal bones were simply dislocated. This probably exactly represents the lesion on the left and right side in the present case. From these experiments Panas concludes that in the majority of such cases ocular paralysis after skull injuries are due to fracture of the base, the loss of the power of the muscles being caused either by direct injury to the nerves supplying them or to pressure of blood or inflammatory exudation.

Next, the comparatively feeble pulsation which could be obtained should be noted. This taken along with the absence of bruit on auscultation, of pulsation of the veins around the eye, and of the subjective sensation of thrill, marks the case as somewhat different from most cases of pulsating exophthalmos. The explanation of these rather unusual conditions is probably to be sought for in the position or size of the clot in the sinus differing from that which usually exists.

The operation performed was that which is recommended by all the authorities. Although ligation of the internal carotid would seem from an anatomical point of view to be sufficient to meet the requirements of the case, the tying of the common carotid is by common consent adopted as the orthodox procedure. As far as I can ascertain on looking up recorded cases ligation of the internal is only referred to by one authority, and that in Treves' "System of Surgery," but it never seems to have been done.

The group of nerves affected are interesting. On the right side the sixth escaped, while the portio dura division of the seventh was partly involved. The paresis of the orbicularis oculi on this side is of special interest as showing the correctness of Mendel's conclusions when he points to the connection between this portion of the facial and the nucleus of the third, and again of Tooth's and Turner's observations as to the existence of different nuclear districts for the upper and lower portions of the facial. From these combined observations Sillex concludes that the connection with the third nerve is only with that portion of the seventh supplying the orbicularis and not with that which controls the occipito-frontalis muscle.

The improvements following the ligation of the carotid should next be noted. Both corneæ seem to have recovered some of their sensation power and the pupils are less dilated. On the left side the proptosis and venous engorgement are less, the movements in some directions improved; the field enlarged; acuity of vision increased; the neuro-retinitis lessened; and all neuralgic pain is gone.

Lastly, the satisfactory result of the operation for the ptosis on right side deserves mention. This

operation of Hess' seems to be an excellent one for paralytic ptosis. It is as efficacious as it is simple to perform, leaves little or no disfigurement, and is apparently equally suitable for this kind of ptosis as for the congenital variety. In some respects it surpasses the operative procedures recommended by Eversbusch, and more recently by Wolff (Arch. Ophthal.) and Hotz (Ophthal. Record.)—which procedures are based on the principle of advancement, either subcutaneously or subconjunctivally, of the levator by tendon resection—as these operations are more difficult to perform, suit probably only in congenital ptosis, and if not thoroughly well done are likely to be unsuccessful; and, again, the operation under consideration is an improvement on Panas' inasmuch as it leaves less puckering of the lid afterwards.

This case is the third of Pulsatory Exophthalmos now on record in our proceedings, two of which, including this one, were of traumatic and the other of spontaneous origin.

The minutes of the last meeting were read and confirmed.

The PRESIDENT reported that the Council had carefully considered the resolution of Dr. Poulton, passed at the last meeting of the Branch, and had decided that it was unnecessary to take further steps in the matter. The President briefly explained the reasons that had guided the Council in coming to this decision.

CORRESPONDENCE.

From the Secretary of the Medical Defence Association of Victoria, *re* a conference with regard to lodge practice.—Referred to the Council.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Branch was held at the Royal Society's Room on Friday evening, 30th September, 1898. Present: Dr. E. T. Thring, Vice-president (in the chair), Drs. Crago, S. H. Hughes, Neill, Pockley, Gordon MacLeod, Fiaschi, Sinclair Gillies, Morgan Martin, Magnus, Gordon Craig, Litchfield, J. A. Dick, Flynn, Macdonald Gill, Gledden, Traill, Worrall, FitzPatrick, Labister, Kendall, Harris, Lloyd, Coutie, Binney; visitor, Dr. Pain.

The minutes of the previous meeting were read and confirmed.

The CHAIRMAN announced the nomination of Dr. R. J. Millard, of Goulburn.

The resignation of Dr. George E. Rennie as hon. secretary of the Branch was announced by the Chairman.

Dr. S. H. Hughes exhibited a patient suffering from pigmentation of the conjunctiva.

He said the case I am showing this evening, Margaret R.—, *æt.* 56, has been coming to the Prince Alfred Hospital for the last 15 years, at intervals of about three months, for distichiasis. On April 19th of this year I noticed that the left lower palpebral and ocular conjunctivæ were deeply pigmented. The pigmentation was deepest at the edge of the lower lid, where two small almost quite black patches were seen. From the lower lid the pigmentation spread to the ocular conjunctiva, invading its lower half. The ocular conjunctiva was freely moveable over the sub-conjunctival tissue. The patient was not aware of its presence, and therefore could give no clue as to how long it had been growing. My colleague, Dr. Pockley, who had seen the patient some two months before, assures me the conjunctivæ were quite free then.

Since April the pigmentation has spread to the upper ocular conjunctiva, above the external canthus, and the left preauricular lymphatic gland has become enlarged. I removed a piece of the lower ocular conjunctiva, and having embedded it in celloidin and cut microscopical sections from it, examined it microscopically and found it to be a melanotic sarcoma. The specimen is under the microscope on the table for any of the members who may wish to examine.

Melanotic sarcomata of the conjunctiva are rare, and more particularly in this situation. They are generally situated at the limbus conjunctivæ, but a few have been described as growing from the junction of the conjunctiva with the skin at the edge of the lid, and this would appear to have been the origin of this growth.

Dr. THRING asked Dr. Hughes what treatment he proposed to adopt in this case? The speaker dwelt upon the frequency with which a melanotic sarcoma is overlooked until too late for operation to be curative. As an instance he mentioned a case which had occurred in his own practice—an old lady of over sixty noticed a small black spot under the nail of one finger. As it increased, the top joint of the finger was amputated. More than a year after this, enlarged glands were felt in the axilla of the same side, and in addition a nodule of *scirrhous carcinoma* was found in the breast of the same side. The breast was amputated and the axilla cleared out, and it was then found that the glands were pigmented. Microscopic examination showed that they were sarcomatous, and secondary, not to the carcinoma of the breast, but to the pigmented patch which originally grew beneath the finger-nail. The subsequent history was that the patient died rather suddenly about eighteen months after the second operation from perforation of the ileum, the result of breaking down of a nodule of melanotic growth in the wall of the gut. The speaker wished to emphasise the fact that in melanotic growths there was a decided tendency for the nearest lymphatic glands to become infected, so these growths differed from other sarcomata. This is shown both in Dr. Hughes' case and in the one just referred to.

The CHAIRMAN said Dr. W. F. Quaife had telephoned that he could not read his paper, and as Dr. McAllister was not present, the next business on the paper was a discussion on the prevailing epidemics of measles and influenza. He had, however, to say that the gentlemen who had promised to commence the discussion were not present. Dr. Scot Skirving had sent some notes, which he (Dr. Thring) would ask Dr. Crago to read.

Dr. CRAGO (for Dr. Scot Skirving) read the following notes:—

"I. Do these diseases, influenza and measles, predispose towards each other? I am strongly inclined to think they do. Any condition which will lower the general resisting-power of the body makes the invasion of fresh evil likely. It is especially with the frequency with which measles has been recently preceded by influenza that this has struck me.

"II. (a) The type of influenza in this recent outbreak seems to me less generally severe and less respiratory in its manifestations than the earlier epidemics I have seen, I think, more cases with obtrusive gastrointestinal symptoms than in former years. (b) Of measles, I have formed the opinion that this outbreak has been of a severer type than in either of the two former epidemics which I have witnessed in Sydney. However, I may easily be wrong in this inference, for the slow changes which come over the practice of the individual has probably caused me in this attack to see as a rule only the more severe cases. I seem, at any

rate, to have come across people who were more acutely ill this time, and more adults affected, and more cases of second attacks than I remember formerly.

"III. Pneumonia, middle ear suppuration, and glandular troubles have also come across my work in larger numbers than in past epidemics. I have seen rubella frequently, scarlet fever twice, and diphtheria twice follow measles within three or four weeks.

"IV. I wish to call attention to the exceeding proneness to irregular pyrexia which follows some severe cases of measles. I am not unmindful that any exhausting disease, notably enteric, is often followed by an instability of heat regulation which often gives rise to anxiety. Fresh air and a fuller diet often cure such cases. In the after-pyrexia of measles the rises of temperature have in a number of cases been very high—104°, 104°.5—and have been quite out of proportion to any local cause. In most instances, however, I must confess that some glandular enlargement exists, or the throat felt sore even if it didn't look so. Doubtless toxins can be called in to explain this pyrexia. I, however, have noticed that these alarming rises of temperature which occur after the rash is gone and the patient apparently doing well, have been met with chiefly in children of strumous type, or in whom the tonsils were large, or where I suspected adenoids. In all the cases of suppuration of the middle ear which I have seen, the throat or naso-pharynx was unhealthy. Another argument for early dealing with such conditions before an exanthem attacks the patient. Several children have complained of an odd pain in the chest, chiefly behind the sternum, but also in the region of the root of the lungs, during these rises of temperature. I could not find any very obvious cause for it. Is it possible that enlarged intra-thoracic glands might explain it? I would like to know if this has been specially noted by any other practitioner.

"V. I suppose most of us are prepared to accept German measles as a true disease. I am myself for reasons I need not enter into. All I would say here is to note the frequency of a rash which in this epidemic has followed true measles within four weeks, and which I have regarded as rubella. As to its diagnosis, I think the difficulty and importance lies in distinguishing it from scarlet fever rather than measles. I am satisfied that in some cases it is practically impossible from clinical grounds to be quite certain. The following points are worth remembering:—

"(a) In rubella the symptoms for the most part are slight, pyrexia is small, there is very seldom initial vomiting.

"(b) The throat trouble seldom goes beyond redness. Actual solution of continuity would away one towards scarlet fever.

"(c) The rash, red and fairly diffuse as it often is, still, if closely looked into, shows a certain papular discreteness alien to scarlet fever. There is an absence of the intense red net with in the latter disease.

"(d) The lymphatic gland enlargement is early and special in rubella; in scarlatina later and proportionate to the throat trouble.

"P.S.—I hope to hear of some bacteriological observations on these diseases. The clinician is always on the look-out for some such scrap of knowledge to help him on his weak-kneed way."

Dr. CRAIG said his own experience tended to bear out Dr. Scot-Skirving's opinion that the prevailing epidemic of measles had been of a severer type than the previous epidemics he had had to do with. He might be influenced in that opinion by the fact that he had been in charge of the cases that had occurred at the Benevolent Asylum where the cases had been

very severe, and the mortality from broncho-pneumonia very high. In the early part of the outbreak at that institution an attempt had been made to isolate the cases, but the isolation department soon became overcrowded, and the cases assumed an alarming condition, many of them becoming very livid, and presenting an appearance that was probably spoken of as "black measles." As soon as the overcrowding was done away with, cases of broncho-pneumonia became less frequent, and the cases became less severe. Amongst the sequelæ were two or three cases of ulceration of the mouth and gums, one case at first resembling cancrum oris, and in which several teeth dropped out, and some necrosis of the alveolar processes of the jaws followed. Several of the pupil nurses had severe attacks of measles—i.e., with a temperature of 105°—but not accompanied by any serious complication, nor followed by any sequelæ excepting a return of the rash three or four weeks after the attack, but without any feeling of illness. He (Dr. CRAIG) gave instances of what he considered to be modified second attacks of true measles. He had also seen some scores of cases in private practice, chiefly in young adults, of what he considered to be röteln or rubella, in some of which the rash assumed the scarlatiniform, and in others the morbilliform, appearance, but most of these had enlarged glands at the back of the ears and along the posterior border of the sterno-mastoid muscle. The temperature in these cases seldom reached 100° F., and were unattended by any catarrhal symptoms.

Dr. L. F. NEILL said one cannot but have been struck during the present epidemic with the frequency with which, both in adults and in children, a history of a previous attack of measles has been given. Now most authorities lay down the rule that second attacks are rare, and Dr. Dukes, who has had a very extensive experience, makes the very definite statement that he has never seen any real instances of children suffering from the same infectious illness twice. Were we to judge, however, from the histories of patients in the present epidemic, we should be driven to regard second attacks as common. That we have had an extensive outbreak of measles is clear, but that concurrently we have had an extensive outbreak of rubella is also not to be doubted. My experience of the present epidemic is not in accord with that of Dr. Scot-Skirving, as in the large number of cases which I have seen the general type has been mild, but in my district I have seen much of rubella. It has been a common occurrence to see patients who have awaked in the morning and found a rash on the face and body, and have had no premonitory symptoms of catarrh. They have frequently expressed themselves as feeling but little out of sorts; the conjunctivæ are suffused, and the throat has been a little sore. Cough is slight or absent, and appetite is frequently unimpaired, though in some cases there has been more decided illness. The rash is discrete, finely papular, morbilliform in type in most cases, but in a few scarlatiniform in character. The most notable feature has been the enlargement of the lymphatic glands over the mastoid processes and behind the sterno-mastoid muscles. In some only a few of these glands are enlarged, but in many the enlargement has been of a whole chain of glands. In several of the cases there has also been enlargement of the axillary and inguinal glands, and I have also seen the gland enlargement precede the rash several days. As differential points in the diagnosis of rubella from morbilli, I would lay stress on the gland enlargement, the absence of coryza and watering of the eyes, the slight throat changes, or the diffuse redness of the soft palate in contradistinction to the distinctly patchy

endanthem of the soft palate in morbilli, and on the discrete papular character of the rash without any crescentic arrangement. I cannot agree with Dr. Crago in regarding the cases of an attack following shortly after a primary one of which he has spoken, as modified measles or relapses, as relapses in measles are extremely rare. Rather would I regard them as cases of rubella occurring after measles, or as cases of relapse after rubella, which may occur two to three weeks after an attack. Of the former event I may cite as instances two patients, a boy and a girl, who had illnesses which I diagnosed as measles on the 18th and 28th of August respectively, and who developed rubella on the 25th September. As bearing on the question of second attacks of measles I may cite the fact that none of the many patients whom I saw with measles in the epidemic of 1893 have come under my observation in this epidemic with measles, but several have had rubella. The paper of Dr. Colquhoun to the *Australasian Medical Gazette*, of September 20th, is of much interest as showing the existence of an extensive epidemic in Dunedin of rubella, or r  theln as he prefers to call it, and in which he has condensed a large amount of information, showing how varying and confusing have been the conditions described under the name of rubella, a fact which explains the statement of Dr. Dawson Williams, in "Allbutt's System of Medicine," that "at the present time it is not possible to give an altogether satisfactory description of the epidemic disease to which the name of German measles has been applied."

Dr. THRING wished that Dr. Scot Skirving had been present that evening, for he would very much have liked to have had his definition of influenza. For, although influenza was undoubtedly an acute specific epidemic disease, it appeared also to be a convenient cloak for faulty diagnosis. Influenza was a most tiresome and possibly serious complication in operation cases. During the past three months he had had five cases of abdominal section in which influenza and pneumonia had appeared at various periods during the first fortnight after operation. Fortunately all five patients recovered. Another serious complication of influenza was acute nephritis. These cases were usually fatal. With regard to the glandular swellings in r  theln, he quite agreed with Dr. Neill. The enlargement of the lymphatic glands at the posterior border of the sterno-mastoid in r  theln was a most useful sign in distinguishing between this latter disease and a mild attack of true measles.

Dr. J. ADAM DICK said that he had experience of the epidemic under discussion. He had seen cases of both diseases in private practice. He had also noticed cases of scarlatina, parotitis, r  theln, and other febrile conditions during the same period. In the Asylum for Destitute Children, Randwick, where there were annually about two hundred inmates aged from four to fourteen years, he had many cases of true measles under treatment; several cases had been severe, and some had been complicated with catarrhs of varying degrees of seriousness in the respiratory and other organs. The treatment adopted in the uncomplicated cases was exceedingly simple. There had also been a few cases of scarlatina, and upwards of fifty cases of parotitis in the institution. There had been no fatal case hitherto from this epidemic, nor had there been one death in the institution from any other cause for ten years.

Dr. KENDALL said he desired to say a few words, more with a view of obtaining information. In his practice he had lost two cases—one a man of 24 years of age and the other 20. In the first case the man took ill on the Wednesday, the rash came out well on

Thursday and commenced to die away on Friday. On the Sunday while he (Dr. Kendall) was present the patient took convulsions and died. In the second case the patient developed pneumonia and then had convulsions. In literature he could not find anything bearing upon the cases.

Dr. WORRALL asked if the urine had been examined.

Dr. KENDALL said the urine in both cases had been examined and there was no albumin present.

Dr. POCKLEY said there were two points which he had noticed in the present epidemic—first, the absence of cases of ulceration of the cornea, and secondly the number of cases in adults.

Dr. FITZPATRICK said the preponderance of cases in the present epidemic of measles had been adults. He had some cases of "rubella," with complications of throat trouble. In one case the child had distinct scarlet fever and the remainder of the family had "rubella."

Dr. MORGAN MARTIN said the present epidemic of measles had been very extensive; the worst of it ended about one month ago. The true measles, with the usual conjunctivae, middle ear and other troubles, was mixed up with the German measles. He quite agreed with Dr. Neill's remarks. He (Dr. Martin) had seen a few cases of second attacks of true measles. He did not think the influenza epidemic was concurrent with the measles epidemic—the influenza was earlier in the year.

Dr. CRAGO proposed and Dr. FIASCHI seconded—"That Dr. G. T. Hankins be elected Councillor for the remainder of the Branch's year.—Carried.

(At the adjourned meeting of the Council, held at the close of the general meeting, Dr. Hankins was elected Hon. Secretary).

The CHAIRMAN stated that the Midwifery Nurses' Bill was before Parliament at the present time, and as the members strongly condemned a similar bill in 1895, the Council desired to know if the members wished to have the bill opposed or not.

Dr. NEILL drew attention to the fact that the matter was irregularly before the meeting, and that the consent of the members to proceed should first be obtained.

Dr. CRAGO proposed and Dr. WORRALL seconded—"That as a matter of urgency the Midwifery Nurses' Bill be dealt with at this meeting, although not on the business paper."—Carried.

Dr. CRAGO proposed—"That in the opinion of this Branch of the British Medical Association the bill introduced by Dr. Graham in the Legislative Assembly is likely to increase the dangers arising from the incompetency of midwives, and should therefore in the public interest be strenuously opposed."

Seconded by Dr. MORGAN MARTIN.

Dr. J. A. DICK moved as an amendment—"That the bill be referred to a committee consisting of the President, Vice-President, Hon. Treasurer, Hon. Secretary, Drs. Fiaschi, Worrall, and Knaggs for the purpose of considering its proposals, and report to the next meeting of the Branch."

Seconded by Dr. NEILL and negatived.

The original resolution was then put and carried unanimously.

The certificates and minor trophies given for races of course would not cover training expenses, but the desire to see their individual clubs supreme always results in a fair open neck and neck struggle between the enthusiastic members. The various Victorian cycle firms prompt this hopeful spirit by a liberal allowance of trophies. The Austral Cycle Agency, for instance, are pioneers in this healthful phase, and make the pace a pretty warm one for competitors.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

REPORT of a meeting of the Queensland Branch of the British Medical Association, held in their rooms, Edward-street, on Friday, 2nd September, 1898.

Present: Dr. Connolly (president), Hon. Drs. Taylor and Marks, M.L.C., Drs. Orr, Comyn, Francis, Brockway, Carvoso, and Jackson.

Dr. G. P. Dixon was unanimously elected a member of the Branch.

Dr. TAYLOR showed the following case:—

R.C., aged 16 years. About eighteen months ago pain commenced in the left ear, and in a few days after there was a discharge of pus, which continued for three months, when the mastoid antrum was opened by the usual operation, and in a short time the discharge ceased. Hearing, 2/30. A month or so after, an audible tick in the ear became established, which was found to stop on pressure applied over the mastoid process. The membrana tympani pulsed synchronously with the tick. An incision about two inches long was made down to the bone, which had the effect of stopping the tick permanently. About three or four months after the tick stopped in the left ear, a very loud tick occurred in the right ear, which up to this time had never been affected in any way. Pressure over certain parts behind the ear being found to stop the ticking, an incision was made similar to that on the other side, which had the effect of stopping the tick for a short time. Pressure applied to other parts over the mastoid process being found to again stop the tick, a second incision was made, which stopped it for a time, and finally a fourth operation was performed. This time a piece of skin with the tissues down to the bone, two inches long a quarter of an inch wide, was excised. This last operation has effectually stopped the tick. The hearing is very good, viz., right ear 20/30, and left ear 13/30.

Discussion on the epidemic exanthems, now present in Brisbane:—

Dr. JACKSON, in opening the discussion, said that among the many difficulties that beset one in dealing with the exanthems now present in Brisbane those of diagnosis were paramount. In the Fever Hospital the subsidiary difficulties associated with the isolation of each disease from the other, and the isolation of suspicious cases from all others, added more perhaps than could be appreciated by outsiders to the difficulties. The first question for discussion seemed to be what are the exanthems now present in Brisbane. There were undoubtedly cases of scarlet fever, and a considerable number of them. Then there were cases that had all the characters of measles, none of them very severe, but they might be said to be typical mild measles. (Parenthetically it might be said that the rashes were perhaps not so crescentic as one might expect in measles.) In addition to the two classes of cases above described there were a great many that answered all the characters of röteln. These were the commonest to be observed, but there were practitioners who were speaking of having seen recently dengue, influenza with a rash, diphtheria with a rash, while there were unmistakable cases of chicken-pox about the town. Between all these different diseases the matter of diagnosis, the members would admit, was likely to be a very difficult and almost impossible thing. And when in addition they became mixed with one another as scarlet fever with diphtheria, a common diagnosis, or scarlet fever with whooping cough, or even with measles, the difficulties became insuperable. The next question for consideration of members in this discussion seemed to

him to be the all important one of aids to diagnosis. What were to be relied upon to establish a diagnosis? Between well-marked measles and well-marked scarlet fever there was not any difficulty in accepting the ordinary text-book guides. What was most difficult was to distinguish mild forms of either from röteln, or even occasionally from one another. The appearance of the rash is no guide in many cases, because it in neither disease entirely or always follows the text book definition. If one turn to the complications for aid one gets no certain help, for the sore throat of scarlet fever may be very slight, so slight as to be overlooked, and this particular complication is a common accompaniment of measles. Broncho-pneumonia and various chest troubles are common in scarlet fever, though perhaps not so frequent as in measles. The periods which in text-books are laid down as being of different lengths in each disease are extremely variable in that respect in each of the diseases—measles, scarlet fever, and röteln. The period of invasion often depended on the history given by an ignorant relative who perhaps had not observed anything until the child was desquamating. The desquamation period was an assistance where it was well marked, but in all three diseases it was often absent. If one accepted text-book definition of the length of the invasion stage as being from three to four days for measles and sometimes as much as three in röteln the stage of invasion was clearly no assistance in distinguishing one from the other. The rash in a case of mild measles was often identical with that of röteln in appearance. In this connection it was an interesting fact that in the early part of the present epidemic cases of measles were mixed with those of röteln in tents, yet there was no instance in the speaker's experience where either disease had been caught by a patient suffering from the other. Scarlet fever patients had got measles, but no patient with measles caught röteln or the converse. From this fact he was inclined to believe that he had under treatment only one disease, either only mild measles or only röteln. He would be told that various observers had seen both diseases in the same patient at different ages, but against that was the undoubted fact that measles did not confer immunity to anything like so common an extent as scarlet fever, and it did not seem to him sufficiently proven that so called röteln was not "second attack measles." Where cases had been so mixed as they had been in the Park Hospital, if there were two separate diseases under observation, there would have been some at least who had acquired both. Both measles and röteln are now so common that it has been impossible to continue taking either in, and we have given them up. Going on to speak of the complications of the various diseases, and referring first to those of scarlet fever, there were some differences between the descriptions of that disease as it occurred in Brisbane and in colder climates. Nephritis, which was common enough, was not nearly so common or so severe as it appeared to be in colder climates. Undoubtedly that was due to the greater activity of the skin in the warmer climate, and here in Brisbane it even became less common and severe as the summer replaced the winter. In the treatment of an epidemic in a hospital the measure of the number of cases of nephritis will be to a large extent the measure of the care of the nurse in clothing and keeping clothed the children under her care, especially during convalescence. Her watchfulness in this particular will be especially required at night to prevent them kicking the clothes off. In the two large epidemics which he had seen, he had never had to resort to the hot-pack for the

treatment of nephritis. Upon the appearance of a little albumin in the urine the administration of a little tinct. ferri mur. acted like a charm, though of course the patient was at once confined to the house or tent out of the cold if the day was one of westerly wind, and upon warm days the effects of the medicine were enhanced by "sunbaths," i.e., sunlight on the verandah in some nook sheltered from the breezes, while all the time great care in clothing was observed, and slop diet only permitted. Anæmia is common indeed among children recovering from scarlet fever, with the nephritis occasionally, but often without, and he made it a practice to keep a stock mixture of a few drops of the iron tincture with glycerine and water, and ordered it for every pale face he saw in making his rounds. It was noteworthy that it seemed to be a matter of indifference whether the tongue was clear or not. He had been taught that a clean tongue was necessary before giving the iron. Arthritis was mentioned as an occasional complication. He could not recall one case of arthritis in about four hundred of scarlet fever which he had seen. There have been one or two cases of pleurisy among the scarlet fever patients, and a few of broncho-pneumonia. Cardiac complications I have not detected. I do not examine all the hearts, and perhaps, therefore, I may have overlooked a few cases of mild endocarditis, but I am sure it is a rare complication in Brisbane. Ear complications are common, especially in those children who have post-nasal growths, and this latter trouble seems to me to play a very important part in the increase of mortality in the younger children. Mortality is, I think, higher in children of four or five years who have adenoids. Adenitis of the sub-maxillary glands is common, and also worse where the child has post-nasal adenoids. He had seen one case of noma of the mouth, and had never seen chorea, though he thought it likely that this complication would belong rather to a later period of convalescence than he was accustomed to see. He thought the prognosis was worse in young children, and decreased up to adult age, and on the whole adults appeared to get through the disease better than children.

Dr. TAYLOR said that in the present epidemic he had seen no scarlet fever and only a few cases of measles. Whether they were genuine cases of measles in every case was hard to say. Often the rash appeared to be very indefinite, and there was sometimes no fever. He had seen one case remarkable for the rapidity of the pulse, which was 140, and remained 120 even with strychnia and digitalis. The palms of the hand were peeling in flakes. The rash had come on the second or third day.

Dr. COMYN had attended a great number in this epidemic. The rashes were not very distinctive. Had seen coryza, and the usual crescentic rash of measles, but the majority were cases of German measles. Had seen one case with anasarca, in which the mother declared there had been no rash, though she had looked for it, and the child was desquamating. He used the tincture of iron in anasarca with the best effect.

Dr. MARKS related one case in which there had been röteln followed in the course of ten days by black measles, though the consultant in the case had suggested a possibility of scarlet fever. There was flaky desquamation.

Dr. FRANCIS thought that the text books were helpless in distinguishing between the rashes of the present epidemics. He was glad to notice that Dr. Jackson had pointed out the seriousness of post-nasal growths in this connection. He had himself called attention to this in an address to another society.

Dr. CARVOSSO admitted that in matters of diagnosis he was often very doubtful in connection with these epidemics. Often, for instance, a case that began like scarlet fever ended up by resembling röteln. He had seen both measles and German measles in the present epidemics. He spoke of persistent cough as an occasional symptom difficult of explanation and treatment. Deafness was common in his cases, and it was difficult to prognose as to its permanency or otherwise.

Dr. BROCKWAY had seen undoubted cases of measles proper, and had diagnosed a case in his own family as German measles. Instancing the perplexities surrounding diagnosis, he spoke of a case in which he had diagnosed by candle-light a typical scarlet fever rash, which, on going to the hospital, had been called, he thought rightly, röteln. An important point in the diagnosis which had been impressed upon him by a high authority in the old country was that in scarlet fever you often found desquamation in certain places before the rash had disappeared in other places. He referred to a point which was important in regard to the spread of these diseases in hospital that was the disregard with which people sent toys to the hospitals which had been infected with the epidemic diseases which had attacked their own children. Regarding the disinfection of rooms and wards. In the fever hospital with which he had been connected in the old country they had been accustomed to hose the walls, while the floor was washed with carbolic soap in the ordinary way.

Dr. CONNOLLY had seen typical measles, and they had been generally in adults. Had seen one case of petechial rash in a woman which had recovered. Broncho-pneumonia had been rare in his cases. Speaking of the arrangements for notification he remarked that the Health Act was deficient because the Health Board could not recommend notification till an epidemic existed. He thought that notification should be paid for. Medical men were the only men who were called upon to do work for nothing. All his scarlet fever cases had been children.

Dr. JACKSON, in reply, said that he always looked upon cases that peeled in flakes as scarlet fever, and where he saw cases that he had called measles so desquamating he reviewed his diagnosis. Persistent cough such as that mentioned by Dr. Carvoso, was, he thought, often due to post-nasal growths, and was well treated by Potash Bromide, which acted better than anything he knew. The history of these epidemics was always the same in the direction from which they came. They were always in the southern colonies before they came up here; they were in fact brought thence. The dengue came from the north. As to the means we had for dealing with them—the General Hospital had always taken the work. As soon as their available accommodation was occupied it became necessary to draw the Home Department's attention, and notification was the result. That is, there was an epidemic before the Health Board could notify. He believed that the Health Act said that as soon as an epidemic was threatened notification could be established by the Board. He wished that the members of the Board were of the same opinion as himself that an epidemic was threatened as soon as one case existed. If they did they would then be able to make all the infectious diseases notifiable before an epidemic existed. He had a good many times now established hospitals under canvas, and there were one or two tips about tents that others might find useful. There were four kinds available. The E.P. tent is an excellent one for the purpose, and held a good many patients. The

square tents made of calico that were supplied from the Government stores were too thin; they entailed the putting up of a framework of timber, were badly ventilated, cold in winter and hot in summer. The military bell tent was an excellent one when it was double—that is, had a fly over it—but those that had only a single roof did not keep out the rain, though they did well enough for use as closets, etc. With E.P. tents and the double round tents in sufficiency, patients could be made very comfortable, especially if good drains were cut at the start to keep the storm waters from flooding the floor. If this were done, patients were very comfortable. He apologised for having undertaken to open the discussion. He had been so busy that he had to make his notes a few hours before the meeting, and complete them in the meeting room. He sought the indulgence of members for the imperfections.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting was held in the Rooms, Austral Buildings, Collins-street, on Wednesday, September 28th, 1898, at 8 p.m. Present: The President (Dr. McAdam, in the chair), and Drs. Halley, Greig, Kent Hughes, Springthorpe, Cuscaden, Stawell, Allen, Meyer, McGee, Andrew, J. R. M. Thomson, Bennie, Strong, Laurence, and Sutherland.

The minutes of the previous meeting, as printed in the *Gazette*, were confirmed.

The hon. secretary then read a paper—"Iodoform Eczema: A Family Idiosyncrasy," by A. W. Esler, M.D., Heathcote. (To appear in a future issue).

Drs. Kent Hughes, Meyer, and Cuscaden mentioned similar cases.

Dr. LAURENCE objected to the designation. The cases were really dermatitis, due to a recognisable external cause. There was also an iodoform dermatitis, the result of internal administration.

Dr. ANDREW had never seen a case, though using iodoform largely.

The PRESIDENT suggested that the iodine molecules were arranged in a peculiarly irritant manner in iodoform.

Dr. LAURENCE explained that good authorities held that there was a skin irritation in 75 per cent. of cases under ordinary doses of Pot. Brom., though it required searching for.

Dr. SPRINGTHORPE then read a paper on "Albuminuria in Life Assurance." (See page 419.)

The PRESIDENT thought the Branch indebted to Dr. Springthorpe for so lucid and complete a paper on so important and interesting a subject. It shewed the complexity of the condition. He agreed that the usual tests required more discrimination than they usually got, and that erroneous conclusions were frequent. A routine should be gone through including specific gravity, and reaction, as suggestive helps. He had been struck by the frequency of high specific gravity in Victorian urines apart from any sugar, and suggested it was due to excessive meat diet.

Dr. STAWELL, as a junior city examiner, had been especially interested. The question was an intensely practical one. There were pitfalls and dangers attendant on the ordinary methods. The examinations were often held under most unfavourable conditions. The usual tests were undoubtedly unreliable. In his opinion the precipitation of moccin by nitric acid was the most serious, especially in females, and it was often

mistaken for albumin. Hence he quite agreed as to the superior value of the acetic acid and ferrocyanide test, and had used it satisfactorily for years, but he preferred to mix two samples of urine with ferrocyanide, and add the acid only to one—the contrast helped the diagnosis. His custom was to use nitric acid in the cold, and when any cloud appeared to take the specimen home and settle its composition by the ferrocyanide. As regards significance, the complexity was not understood by companies, and the special care taken was not sufficiently valued. He, too, had seen even large quantities of albumin in apparently healthy people disappearing in a few days, as for example after long cycling rides, and others with low specific gravity without albumin, though it was suspected the kidneys were damaged.

Dr. ALLEN agreed as to the importance of albuminuria, but looked also to the presence or absence of blood, epithelial casts, etc. Albuminuria might last for years in the pale urine of stout, high-living people, without apparent disease. He quoted also the instance of a patient with lardaceous disease all of whose lardaceous symptoms disappeared after an attack of typhoid fever.

Dr. KENT HUGHES reminded members that "copper wire" and "silver wire" appearances of the retinal vessels might appear long before albuminuria in arteriosclerosis and advocated ophthalmoscopic examination in such suspected cases. He would ask how would Dr. Springthorpe deal with a case of intermittent albuminuria in a patient otherwise healthy.

Dr. LAURENCE also asked how many samples would be needed, and whether the urine should not be mixed.

Dr. MEYER was afraid the special examinations would frighten the proponent away.

In reply, Dr. SPRINGTHORPE thanked members for their courteous hearing. He had shown the partial nature of the present examination, and suggested its extension in suspected cases. The specific gravity might be very misleading unless sampled from the 24 hours' output. It was quite possible that excessive meat diet might raise the specific gravity, but there were so many compensating factors that the question required further investigation. Certainly arteriosclerosis and subgranular kidney with all their sequelæ were so produced to an apparently abnormal degree. No doubt nitric acid and heat properly assessed gave reliable evidence where the amount of albumin was large, but they could not be trusted where the amount was small or where certain checks were not observed—hence his suggestion to discard them. He agreed with Dr. Kent Hughes as to the value of an ophthalmoscopic examination in certain cases—it was one of the necessary extra tests. He would deal with cases in which the cause of lesion were doubtful in the manner he had described in his paper, make such examinations as were required to arrive at a diagnosis—the number of samples and their condition would vary with the circumstances—and perhaps an expert urinalysis might be needed. He had no fear that proponents would disappear. At present they were simply rejected, or if accepted, on such extra loading as appeared necessary to balance not only actual defects but also others suspected but not proved. It was to their interests as well as those of the company to deal with them scientifically. He disagreed with Esler that the examiner should act in the interests of the company—he should act in justice to both company and proponent. His recommendation was an advance in life assurance on the same lines to those on which it had advanced in dealing with glycosuria and heart disease.

EXHIBITS.

Dr. STAWELL showed pathological specimens of (1) a microcephalic brain; (2) a brain and its membranes illustrating the sub-meningeal hæmorrhage of the newborn; (3) a porencephalic brain in which there was a large cavity formation in the posterior half of the left cerebral hemisphere; (4) a brain, in which there was bilaterally, atrophy of the convolutions of the Rolandic area.

- (1) The case of microcephalus was Charles K. C., aged 24 years, who had been an inmate of the idiot department of a lunatic asylum for four years, and died on July 8th, 1897. The head measurements were as follows:—Circumference, $16\frac{1}{2}$ inches; antero-posterior (from glabella to occipital protuberance), $9\frac{1}{2}$ inches; transverse (from tragus to tragus), $9\frac{1}{2}$ inches. The brain weighed $13\frac{1}{2}$ oz. The contour of the brain was typical of microcephaly, the convolutions were small but simply and clearly defined. The occipital lobes were particularly small and did not overlap the cerebellum. As regarded mental development, the boy could just talk a few words, he could feed himself, but he could only understand the very simplest orders. Both as regards the actual head measurements and mental development the case closely resembled the boy, Freddy, described by Dr. Shuttleworth.
- (2) A case of sub-meningeal hæmorrhage. This specimen was taken from a baby, who died slightly convulsed a few days after birth. The labour had been long and difficult, and when the baby was born it was roused with difficulty and remained rather blue, breathing feebly. On removing the dura mater, an extensive clot of blood was found symmetrically covering the greater part of the cortical convolutions. It was to be noted that this form of hæmorrhage might produce the atrophic condition of the convolutions, such as was to be seen in specimen 4.
- (3) In this case there was a large cyst-like cavity which existed as an expansion of the left lateral ventricle and which replaced almost entirely the parietal and occipital lobes on that side. The brain was taken from a child, Emma A. LeB., an epileptic idiot, who died on July 25th, 1898. She could walk, talk, and feed herself. Her right arm was completely paralysed and deformed; there was "weakness" of the right leg and foot.
- (4) This specimen showed symmetrical atrophy and sclerosis of the convolutions of the Rolandic area. The other convolutions were large, but very indefinite and irregular. The case was one of "bilateral spastic hemiplegia," Thomas D., aged 5 years, an epileptic idiot, who could neither stand, walk, nor feed himself, and died on September 4th, 1898, of measles.

Dr. SPRINGTHORPE exhibited a curiosity in the shape of a bottle of milk absolutely sterilized by M. de Bavy without disinfectants or heat sufficient to precipitate the albuminoids. It had been kept for days in a thermostat without any change.

The meeting then adjourned.

MARTINDALE AND WESTCOTT'S EXTRA PHARMACOPEIA, 9th edition, 1898, price 10s. 6d., is now ready. L. Bruck, Medical Bookseller, Sydney.

LAUNCESTON SUB-BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE usual monthly meeting of the Launceston Sub-Branch of the British Medical Association was held on the 26th September, when the following were present:—Drs. Maddox (President), Pike, Pardey, Clemons, Ramsay, Wilson, and Hogg.

The minutes of last meeting were read and confirmed.

Dr. WILSON showed a specimen of abscess of the frontal sinus with perforation of the outer and inner tables and abscess of the frontal lobe, and gave an account of the case; also kidneys from a case of chronic Bright's disease.

Dr. CLEMONS showed a specimen of congenital pericarditis with effusion and a large foramen ovalum—the child who had survived until three years of age and had showed but little cyanosis, had remained extremely small and delicate.

Dr. HOGG read notes of a case of glaucoma complicated with lachrymal obstruction.

Discussion on the various cases followed.

A CASE OF GLAUCOMA ASSOCIATED WITH LACHRYMAL STRICTURE.

By G. HEUZE HOGG, M.D., LAUNCESTON, TASMANIA.

Mr. X., civil engineer, æt. 43, was kindly sent to me by Dr. McCall, complaining of pain in the eye and loss of sight.

He had suffered from watering in the left eye for twenty years, and had been operated on for this trouble with but slight benefit.

The epiphora became much worse about five years ago causing much irritation of the eye and face, and a purulent discharge was superadded; he thinks that an injury to the nose which occurred previously to this was responsible for the accentuation of the symptoms. While the epiphora and irritability of the eye has been increasing ever since, the vision of the left eye has been gradually deteriorating for the last four years, and he has noticed that from time to time there has been a little pain in the eye and brow.

He has been under treatment by several ophthalmic surgeons in the United States and elsewhere for the lachrymal trouble and the failure of vision with but little benefit. They all found the stricture of the tear duct to be apparently impermeable. In March, 1898, he was engaged in extinguishing a fire and thinks that his eye was made worse as a result of the heat, etc.

He was seized with severe pain in the left eye and brow a few days afterwards—the pain which became almost unbearable was accompanied by sickness and vomiting—and vision in the left eye became greatly impaired.

When seen by me on April 2nd, in the left eye there was conjunctival and ciliary congestion, pupil was small, reacting to light and accommodation, tension normal, some opacity of vitreous, optic disc cupped, with dilatation of the veins. L.V. = $\frac{1}{4}$ R.V. = $\frac{1}{4}$. Right eye was otherwise normal. There was severe blenorrhœa of the tear passages of the left eye with irritating epiphora.

The patient seemed much run down having lost strength and weight rapidly.

Eserine drops were ordered and he was kept under observation while the lachrymal trouble was being attended to by probing and syringing with antiseptic lotions.

The pain in the eye and head were much relieved by the treatment and vision improved in the left eye to $\frac{3}{8}$.

After repeated sittings an "Argyll Robertson" probe successfully passed into the nose, three distinct strictures being noticed.

The epiphora and dacryocystitis now improved considerably.

Another attack of acute glaucoma now threatening (pupil dilating somewhat, severe pain recurring and tension increasing) an iridectomy was performed on April 23rd, notwithstanding the purulent condition of the lachrymal passages which still existed.

Before the operation the eyelashes were cut short and the tear passages well douched with perchloride lotion. The eye was not closed up by dressings but treated in an open method boric lotion being allowed frequently to run into the eye and wash away any secretion which might tend to accumulate. The patient was allowed out of the house in a week, and was dismissed soon afterwards with an excellent eye as a result. There was not only no epiphora but the dacryocystitis was practically cured—the left nostril felt more natural than it had done for a long time. Headache had disappeared and the head felt clearer than it had done for four or five years—patient was stronger and putting on flesh. L.V. = $\frac{4}{5}$. R.V. = $\frac{3}{8}$.

The result was, I venture to think, a most satisfactory one considering how unfavourable an eye it was to operate on with its dacryocystitis, and how the lachrymal stricture had baffled previous surgeons. The glaucoma apparently had been going on for some time, perhaps years, and may, I think be best classified as one of those transition forms of glaucoma between the simple and inflammatory types which may run for some time with but few symptoms beyond some obscuration of vision and dull headache, and which suddenly developed an acute inflammatory attack.

As to whether any connection existed between the glaucoma and the stricture of the nasal duct with its resulting epiphora, I am inclined to believe that the constant irritation so caused played a part in the development of the glaucoma.

Many ophthalmologists believe that some intra-nasal troubles are responsible for the production of some forms of eye disease—thus (Heatham, of Louisville, believes that certain cases of glaucoma may not improbably be the result of chronic nasal trouble. Lennox Browne records a case of glaucoma dependent on nasal polypi, Bronner regards some diseases of the nasal mucosa as frequent antecedents of asthenopia and glaucoma, and I have myself seen congestive and asthenopic conditions of the eye dependent apparently on nasal trouble.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY, LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. W. J. S. McKay, O. Bohrmann, R. Bohrmann, Langton, Lennhoff, A. O'Connor, Lougher (Leichhardt), Foord Hughes (Ashfield), Tayler (Woolahra), Scott (Balmain), Anderson (Petersham), Patrick (Marrickville), J. Murray-Gibbes (North Sydney), Hanson (Waverley). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Redfern), Goldrich (Glebe), Powell (Paddington), Pratt (Petersham), Brereton (Marrickville).

PROCEEDINGS OF OTHER SOCIETIES.

WESTERN AUSTRALIAN BRANCH BRITISH MEDICAL ASSOCIATION.

A MEDICAL Association has recently been formed in Perth, W.A., with the title of "West Australian Medical Association," and already numbers over 30 members. It is hoped that permission will be granted by the British Medical Association, so that this Association may be constituted into a branch of that body. The Council for the ensuing year are:—President, Dr. A. R. Waylen; Vice-President, Dr. T. H. Lovegrove; Hon. Treasurer, Dr. F. Tratman; Hon. Secretary, Dr. H. Horrocks; Committee: Drs. H. J. Lutz, J. M. Y. Stewart, D. H. Young.

ROYAL SOCIETY OF TASMANIA.

THE usual monthly meeting of the Medical Section was held on September 7th. Present: Drs. Bright (President), Clarke, Butler, Giblin, Ireland, Scott, Drake, Walch, Wolfhagen, and Spratt.

Minutes of last meeting were read and confirmed.

Secretary reported there was £35 of a credit balance, and that the Committee recommended £15 be spent in the purchase of books for the library.

The Committee's report was adopted.

It was resolved to co-operate with the Launceston Medical Society in endeavouring to get the Government to pay a fee of not less than 2s. 6d. for each case of infectious disease notified.

Dr. WALCH showed a case of tubercular swelling of both ring fingers at the joint, between the first and second phalanges. The patient ascribed the swelling to the jarring of his bicycle handle in riding over rough roads. The symmetry of the swelling was most marked, so much so that some of the members suggested that there might be some trophic disturbance of the spinal cord. From the family history—father tubercular—and progress of the case Dr. Walch was satisfied it was a tubercular arthritis.

Dr. CLARKE showed the organs of an infant who had died on the eleventh day. The mother had borne three children, the eldest of whom was alive and well. The second child had died on the sixth day with malignant jaundice. The last child was apparently born healthy, but became slightly jaundiced, on the third day jaundice continued, and on the fifth day the stools contained a large amount of bile. On this day convulsions became frequent, and anaemia was noticed. The cord separated on the sixth day, when vomiting begun anaemia increased, and the child died on the eleventh day. There was no loss of blood at any time either in the stools, urine, or vomit. At the necropsy on the following day all the organs seemed blanched and pale. Spleen was very large, and so soft as to be almost liquid. All the other organs were healthy, no signs of hæmorrhage. The blood, on examination, showed a very much larger number of leucocytes than in the normal. The case was one of pernicious anaemia.

Dr. DRAKE read notes of a case of typhoid fever with hæmorrhage and extreme collapse treated by an intravenous injection of normal saline solution.

NORTH SYDNEY MEDICAL ASSOCIATION.

A General Meeting was held on Monday, September 12th, at Dr. Clark's house, Walker-street, North Sydney. Present:—Dr. Dagnall Clark (President), Drs. Kyngdon, Sheldon, Hall, Doak, Arthur and Clarence Read. Letters of apology received from Drs.

Borke and Pilkington. The minutes of the previous meeting were read and confirmed. New members elected—Drs. Allen and MacSwinney. Correspondence—A communication was read from the Hon. Sec. Intercolonial Medical Congress, Fifth Session, and the Hon. Sec. was directed to forward the desired information. Dr. Clarence Read moved the following resolutions:—(1) "That any medical man who has held the position of Medical Officer to any Society which has been declared by this Association to be inimical to the interests of the medical profession or who shall have held any lodge at annual fees per member below those approved of by the local medical association of his district shall be ineligible for membership of this association for the period of at least five (5) years from the date of his ceasing to hold such appointment, and shall not be met in consultation by members of this association during the period of disqualification for its membership." (2) "That a copy of this resolution be forwarded to the Hon. Secs. of the Eastern and Western Medical Associations requesting them to bring similar resolutions before their members and asking their representatives on the Council of the New South Wales Branch of the British Medical Association to support a similar resolution being brought forward by Dr. Clark in the council." Seconded by Dr. Kyngdon. Carried unanimously.

NEW ZEALAND MEDICAL BENEVOLENT AND MEDICAL DEFENCE FUNDS.

DR. J. IRVING, Christchurch, N.Z., the Secretary for the N.Z. Medical Benevolent and Medical Defence Associations, has requested us to notify that his annual report and balance-sheet will be presented at the annual meeting of the N.Z. Medical Association in January next. Dr. Irving will be glad to receive arrears of subscriptions from members at their earliest convenience.

REVIEW.

A TREATISE ON APHASIA AND OTHER SPEECH DEFECTS. By H. Charlton Bastian, M.A., M.D., Lond., F.R.S. With illustrations. H. K. Lewis, 136 Gower-street, London, 1898.

In this work the author has reproduced with a few additions the Lum'ean Lectures, "On Some Troubles in connection with Aphasia and Other Speech Defects," published in the columns of the *Lancet* during the months of April and May, 1897. Notwithstanding the enormous amount of literature that has been produced on the subject, the author seems to have culled from a voluminous mass a complete synopsis of the matter of which he treats, and has unravelled a very clear exposition of his views, which after a long study he has been led to entertain. In illustration of his views he has with great pains brought under notice typical cases, some of which were under his own observation, while others were obtained from various sources. His object has been to select simple cases which have been completed by the records of various necropsies, in addition to which a certain number of uncompleted cases have also been recorded for the purpose of throwing light upon special points capable of elucidation by clinical evidence alone. We have much pleasure in recommending this book to our readers as being a most clear concise exposition of a most complicated subject. The work is well illustrated with drawings and diagrams.

(Reviews continued on page 460.)

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH OCTOBER, 1898.

EDITORIALS.

MIDWIFERY NURSES' BILL OF N.S.W.

A BILL to provide for the better training and registration of midwifery nurses, has lately been introduced, and passed through all its stages, in the Legislative Assembly of New South Wales, by Dr. James Graham, M.L.A. This bill is identical with the one introduced by Dr. Graham, three years ago which was at that time very strenuously opposed by members of the N.S.W. Branch, and is similar to the Bill that has been before the Imperial Parliament,

and which has failed to become law in consequence of the opposition of the Government, and of the medical profession in England. We regret that this Bill has been again introduced here in its present state, as although being called a Midwifery Nurses' Act, it defines a midwifery nurse as "a woman who undertakes to attend in cases of natural labour," or in other words it converts all women, who are eligible to be registered under it, into midwives. We maintain that while everyone must approve of any legitimate effort to improve the training and competency of midwifery nurses, it would be a public misfortune to transform every woman now acting in that capacity, into a legally qualified midwife and "hall mark" her with the Government Stamp of Competency. An inferior class of partially educated practitioners, "legally" qualified to practice midwifery, would be thrust upon the public, with a result that would be disastrous to the future mothers of New South Wales.

It is well-known now that many so-called midwives are very loath to be associated with a doctor in a case of midwifery, as they then have to accept less remuneration, and cases have come under our notice where serious consequences have resulted to both mother and child, through this disinclination to seek skilled attendance for their patients. It can easily be imagined, that, given "legal qualification" to practise, by means of Government registration, they will become still more independent of medical men, with a great increase in the number of cases of puerperal fever, and a larger proportion of chronic invalids as results.

We are not aware that any demand for such a measure has been made by the public, or even by the midwifery nurses themselves, and as midwifery is part of the legitimate work of the qualified medical practitioner, whether male or female, no valid reason can be given for such a serious and retrograde step.

While, in our opinion, the chief objection to the measure is the fact that it will at once create an inferior class of legally qualified practitioners, numbering probably 200 to 300, to attend to women in what is the most trying ordeal in their existence, and when the want of proper skill may be fraught with such serious consequences, both immediate and remote, still there are several other serious defects in the bill—

(1.) The authority appointed to deal with the examination and registration (The Board of Health) is a mixed body of lay and medical members, and is, it is reported, strongly opposed to undertake the proposed duties.

(2.) Women who have attended as midwives for 12 months, and can produce a certificate from *one* medical man, are eligible for registration without examination.

(3.) *No definition is given of what constitutes "natural labour."*

(4.) No penalty is imposed for women registered under this Act undertaking cases other than "natural labour" or assuming that they are legally qualified medical practitioners.

(5.) No provision is made for keeping register.

ALLEGED CRIMINAL ABORTION IN THE AUSTRALASIAN COLONIES.

LAST Christmas Night a young single woman, Susan McCallum, died in a private hospital in Hepburn-street, Auckland, under what was assumed to be very suspicious circumstances. An inquest was held, and a verdict of manslaughter was returned against Dr. Arthur Herbert Orpen, who, it was alleged, had performed an illegal operation upon deceased, with a view of procuring abortion. Miss McCallum had been living in lodgings in Auckland, passing herself off as a Mrs. Sparkes. She became pregnant, and consulted Dr. Orpen, an elderly practitioner. He was supposed to have performed some operation upon her, and a miscarriage eventuated. The unfortunate woman became very ill. Dr. Orpen attended her daily at her lodgings, but she grew worse, and he then had her moved to the private hospital, saying she was suffering from acute gastritis. Dr. A. C. Purchas was visiting patients of his own at the private hospital, and Dr. Orpen begged him to see Miss McCallum, and told him of the miscarriage. The patient was evidently suffering from septic peritonitis, and Dr. Purchas curetted the uterus, but owing to her extremely collapsed state at this time he did not feel justified in performing a laparotomy. Miss McCallum made certain statements which led to a justice of the peace, Mr. A. J. Allom, being sent for, and her dying declaration was taken. Although this declaration incriminated Dr. Orpen Mr. Allom did not inform the police for two days. The patient died at 11 o'clock on the night following Mr. Allom's visit, and the body was removed from the private hospital by the undertaker at midnight. In the meantime Dr. Orpen left by the San Francisco mail boat. Mr. Allom and Dr. Purchas were both censured by the jury for not having sooner put the police in the possession of the fact.

Dr. Orpen, however, although he changed his steamer at Honolulu, has since been arrested by the police at San Francisco, and the necessary steps for extradition were taken, and the report of the trial will be found on page 453. Another case of criminal abortion, with death of the unfortunate woman, has recently been investigated in New Zealand. And besides these two fatal cases there have been several other judicial investigations into deaths following abortion in different Australasian colonies, which show very clearly that the gravity of the crime of procuring abortion is not realised by the public at large. With a few vile exceptions the medical profession has never stooped to practice of this description, but this fact remains, that women, both single and married, in large numbers, to avoid disgrace, or to avoid an inconvenient addition to their families, demand that pregnancy shall be prematurely terminated for them. And the supply of abortionists seems equal to this demand. Pregnant women often come to the consulting-rooms of doctors on their unlawful and unholy quest, and express the utmost surprise at the stern denunciation which rightly awaits them. But they say, "If you don't do it we know who will," and it seems they do. Frequent criminal prosecutions prove that outside the medical profession there are numbers who are ready, for a pound or two, to comply with the wishes of their immoral patrons. Medical men know how common it is for their aid to be sought in miscarriage cases, where there is the strongest suspicion of criminal abortion having been procured, and know, too, how often the abortion has been accomplished with the gravest septic complications. The methods of the criminal abortionist are usually of the crudest nature. The illegal operator, as in the case of Sheridan, recently hanged, being drunk as often as not, seeking to introduce some such instrument as a darning-needle, a catheter, a penholder, a sound, a stilleto, a bonnet-pin or the like, may, and frequently does, penetrate the posterior fornix instead of the os uteri, and inoculates a dangerous region with septic germs. The victim runs terrible risks of peritonitis or cellulitis, and no doubt many more fatal cases are attributable to the criminal abortionist than is known to the general public. Prosecutions are beset with obvious difficulties, convictions are extremely rare, and the criminal flourishes and even covertly advertises. Advertisements of pills and mixtures which will conquer menstrual obstructions *from whatever cause arising* are very commonly seen. Women are even invited to communicate

personally with the advertisers in cases of extra difficulty. Such advertisements lower the moral tone of the community, and ought to be suppressed.

Women nowadays think all too lightly of interfering with the physiological course of pregnancy. They are indeed often under the mistaken impression that most doctors are in the habit of prescribing appropriate drugs for women who do not wish to allow a pregnancy to run for more than two or three months. They erroneously regard the taking of drugs to procure abortion, as safe, and perfectly legal. Moreover, there are indications of their becoming educated in the methods of instrumental abortion. Many married women know how to pass an instrument into their own wombs, and they teach one another their dangerous tricks.

It is time the immorality, the criminality, and the gravity of the risks involved, should be brought home to them. All advertisements suggesting any interference with pregnancy, should of course be prohibited, and the police too often lethargic in these matters, should take steps to suppress a nefarious and dangerous trade that is becoming increasingly common in these colonies.

An obvious risk to the medical profession is that when such illegal operations are performed by outsiders, it is often suggested by the operator that a legally qualified doctor shall be called in to complete the case, sign a medical certificate of death if necessary, and thereby incur the odium of causing death, and possibly incur liability to a criminal prosecution for an illegal operation.

MEDICO-LEGAL.

REGINA v. ORPEN.

A VERDICT OF NOT GUILTY.

AUCKLAND, September 13.

THE trial of Dr. Arthur Herbert Orpen on a charge of murder was commenced at the Supreme Court this morning before Mr. Justice Conolly. The body of the court was well filled during the hearing of the case, while about a score of women watched the proceedings from the gallery. Dr. Orpen was indicted that, on the 23rd December, 1897, at Auckland, he did murder Susan Harriet Campbell McCallum. The prisoner, who looked old and very feeble, was allowed to sit down during the hearing of the case. He pleaded not guilty in a tone scarcely audible, but his demeanour was perfectly calm. The right of challenging the jury was freely exercised by the prisoner. The Crown Prosecutor (Mr. Tole) appeared for the prosecution, and Messrs. Theo. Cooper and F. E. Baume for the defence. Mr. Tole proceeded to outline the evidence that would be presented on behalf of the prosecution. He also

referred to the deposition made by deceased shortly before her death. Mr. Cooper objected to reference being made to evidence which might afterwards be challenged and ruled out, but His Honor said this must be left to the discretion of the Crown Prosecutor. Mr. Tole also referred to the deceased girl McCallum having had a miscarriage on December 11, and said he would produce a diary in which there was an entry in the handwriting of accused, "Heard that Susan had a 'mis.'" Counsel pointed out that the crime alleged against the prisoner was one of those crimes committed in a secret way, which still carried with it malice and intent which would be alleged in other crimes. Evidence was given by Marion Metcalfe, widow, at whose house deceased lodged; William Dawson, cabdriver, who conveyed her to a private hospital; and Elizabeth Ogilvie, nurse at the private hospital. The last witness said deceased knew she was dying. His Honor asked how witness knew what passed through deceased's mind. Witness could not say definitely. Deceased did not tell her at the time she was dying, but she was sure the patient knew of her state, because she said, "What will my poor father say?" Detective Grace and W. C. Sharland, having given evidence, Mr. Tole put in a diary to show the handwriting of accused, and also with reference to an entry on December 11. Mr. Cooper pointed out that the diary was for 1896, and it had been apparently regularly written up after December 25. Although accused left the colony on December 25, Mr. Tole said the 6 of 1896 on the first page had been altered to 7. His Honor could not see how a person who had gone away on December 25, could have made entries to the end of the year. The diary was worth nothing.

September 14.

The hearing of the charge of murder against Dr. Orpen was resumed to-day at the Supreme Court. Mr. Tole tendered a letter which Mr. Sharland had received by the San Francisco mail with instructions to send it on to Dr. Purchas. Mr. Sharland (cross-examined by Mr. Cooper) said he believed the instructions were in the handwriting of accused. He could not take his oath that the writing was Dr. Orpen's. Witness sent the letter on to Dr. Purchas, but did not read it himself. Mr. Cooper objected to the letter being put in on that evidence, and his Honor upheld the objection.

Dr. Arthur Challinor Purchas was the next witness called. He stated that accused asked him to see a patient in the Hepburn-street Hospital on December 23, and there Dr. Orpen told him that the patient had had a miscarriage. Witness expressed surprise, and asked accused what he had done. Accused said he had not seen the patient until four days after she had a miscarriage. After examining the patient witness advised the operation of "curetting." Accused asked him to do the operation, and witness consented, Dr. Orpen administering the chloroform. From his examination of the patient witness formed the opinion she was suffering from septic infection or blood poisoning, and therefore he recommended the curetting. Witness produced the curette used. He had used it very frequently. The operation was performed very carefully, and no injury whatever followed the operation. Miss Ogilvie, to whom instructions were given, was a trustworthy and experienced nurse. In response to a message from Dr. Orpen, witness saw the patient again on Friday morning (24th). She was then worse. Witness prescribed for her, and then left. He consulted with Dr. Lewis as to whether it would be advisable to operate upon her in order to save her life. They decided she was too weak to operate upon. Witness had then no hope of her recovery.

Mr. Tole: Would eating oranges and grapes cause the conditions that you saw?—Witness: I think I must say no to that.

Was it a case of gastritis?—I should not have called it a case of gastritis, though she certainly had gastritis when she died.

Could you say what her condition arose from?—In my opinion it arose from absorption into the system of septic poisoning.

Mr. Tole produced a letter, which witness identified as one he had received on February 24. It was handed to him sealed in the office of Messrs. Wynyard and Purchas. It was enclosed in an envelope addressed in the handwriting of Mr. W. C. Sharland.

After hearing argument by counsel as to the admissibility or non-admissibility of the deceased's (Susan McCallum's) dying depositions,

His Honor, in giving his decision, said it was quite clear from the evidence given by Mr. Allom, given straightforwardly and intelligently, that neither he nor Nurse Ogilvie intimated to the woman that there was any danger of immediate or very speedy death. Miss Ogilvie said in her evidence that it was her business to cheer up patients as much as possible, and not to say anything that would make them despondent; while Mr. Allom distinctly said he only asked the question of the woman once, and her answer was: "I am making this statement because I think it probable that I may die soon." His Honor did not say Mr. Allom was at all wrong in not putting any more direct questions to her. Both he and the nurse were clearly of opinion that the woman was dying, and she would not live many hours. If such questions had been put, and she had answered them in the affirmative, or without any question being put, she had said, "I know I am dying," or "may die before many hours," then His Honor thought the position would have been very different. But as it was, he must hold that the declaration should not be accepted.

Mr. Tole said that as the point was a very important one, he suggested that His Honor should reserve the point of law.

His Honor: There can be no point to reserve when matter is rejected. I reject the evidence. Suppose I reserve the point and the Court of Appeal decides I was wrong in rejecting the declaration, and that I should have admitted it?

Mr. Tole: Then the Court of Appeal can order a new trial. If the result of the present trial is an acquittal, accused can be discharged subject to being arrested again if a new trial is ordered. I am quite within my rights in asking that the point be reserved. Counsel quoted section 412, sub-sections 1 and 3, in reference to the power of the court to reserve any question of law for the consideration of the Court of Appeal.

His Honor: This application has rather taken me by surprise. I think I may say on that section that it is probable that I ought to reserve the point.—The point of law connected with the question of the rejection of the declaration was accordingly reserved for the consideration of the Court of Appeal.

The letter signed "A. H. O." to Dr. A. G. Purchas was read by the Registrar as follows:—

"Private and confidential.

"Care of W. C. Sharland, Shortland-street.

"Dr. A. C. Purchas,

"Dear Sir,—Will you please write me full particulars re that case and results, and how it affects. Can I go to England and return and settle in Australia with impunity? I took your advice that Christmas morning and cleared, but I am quite in the dark and at a great loss to understand your action in this case. I

wish, however, to give you credit that in getting that D.D., you had no idea I was implicated in the matter. If I thought otherwise I should certainly not hold my tongue. Must have been great pressure put on that little girl, or she would never have implicated me. In the first instance, the case was well done—never better; and she unfortunately up and about for five days, and wretched insanitary conditions, and her dissipated habits started this obstruction and subsequent cellulitis. The first time I went to her house was six days after it came away. Unfortunately I was ill myself (that you know), and both my nurses—one with rheumatic fever, the other was away at Te Aroha. Had I had her with either of these, the case would never have occurred; or if it did, would never have been heard of. It was the first accident or mishap I had in over 500 cases. I got your assistance in two trivial cases (similar), my own, as I wanted simply to see if you would be friendly, and that I could trust you, as I heard a lot about you from nurses and patients. But I suppose I made a fatal mistake in not telling you out and out in the first instance the truth *re* this one. I myself would never have taken a D.D., no matter who did it, and I cannot see what you expected to gain by my exposure; and if there has been any exposure it has been your doing. I have got plenty of friends, who, if they can get my address, will let me know everything. But I am still willing to give you, as a professional brother, the benefit of the doubt. I will say no more.—Yours truly,

A. H. O.

Dr. Purchas was recalled, and Mr. Tole asked him: You know that letter? He says, "I took your advice that Christmas morning and cleared." Is that so?"

Witness: No, I did not advise him to go. Dr. Purchas further said that if he were told that an operation had been performed by a medical man, and such a wound made as was on the deceased, he would say it was done unskillfully. Dr. Bakewell stated that death was caused by peritonitis and the exhaustion produced by it. Peritonitis was set up by an abscess in the pelvis. The originating cause was apparently a wound.

The evidence for the prosecution was closed, and the address of counsel and the summing up by His Honor adjourned until the following day.

September 15.

At the Supreme Court to-day Dr. Orpen was acquitted on the charge of murder. Mr. Theo. Cooper having addressed the court for the defence, Mr. Justice Conolly summed up. His Honor said that, assuming death to have been caused by the accused in the course of an operation to procure abortion, this did not come within the meaning of the clause under which the charge was laid. The plain meaning of that clause was that the act must be "something which was likely to cause death." His Honor said it was competent for the jury to return a verdict of manslaughter where the person was killed by an unlawful act. If they were satisfied that the prisoner performed an illegal operation, and that the operation caused death, they could bring in a verdict of manslaughter. His Honor did not see that the charge of murder was made out under any circumstances. But before they could convict the prisoner either of manslaughter or of murder they must be satisfied that it was some act by him which caused death. From the evidence there could be no reasonable doubt that what really caused death was the wound caused by some sharp instrument. When that was done or by whom there was no direct evidence. The only direct evidence could be that of the woman herself, and the woman was dead, although she made a statement shortly before her death upon which there was a long and interesting discussion by counsel.

His Honor decided to exclude that statement from the evidence, and the jury must therefore take it that no statement was made at all. His Honor then proceeded to read over portions of the evidence, and pointed out how the evidence of the medical men disposed of the charge of murder. His Honor then commented upon the letter put in, which was certainly a very extraordinary document. There were many points in the letter which Dr. Purchas ought to have been allowed to explain. His Honor went on to say that there was no doubt this practice was prevalent. It was practised by some medical men, and also by some who are not medical men. His Honor added:—"It is an awful state of affairs, and a want of morality that is disgraceful in any country has an attraction for the public. This may be gathered from the fact that the gallery of this court, set apart for females, was crowded yesterday by females to hear the sickening, disgusting details about the examination of this woman's body, and here it is crowded again to-day."

The jury retired at 3 o'clock and returned at ten minutes to 5 o'clock with a verdict of not guilty. The crowd in the court, led by women in the ladies' gallery, applauded, but the police quickly suppressed it. His Honor said it was a most scandalous thing that any person should behave in this manner in a court of justice. He was disgusted to see women leading the applause. This was a most disgraceful thing. If he had had any idea that there would have been anything of that kind he would have had the ladies' gallery cleared long ago of the disreputable persons in it. His Honor added:—"The prisoner is discharged. If any of the persons concerned in the applause are brought before me I will lock them up for the night."

Dr. Orpen having left the dock, a man was brought before the judge, but he said he did not applaud, but only held up his hand, and he was released.

Otago Daily Times, 27th September, 1898.

PHARMACY NOTES.

WE have received from Messrs. C. J. Hewlett and Son, of London, samples of several of their well-known preparations, as well as their *Therapeutical Notes on New Drugs and Medicinal Specialities* and their *Notes on the New British Pharmacopoeia*, 1898. Many of their preparations, such as *Mistura Pepsinæ Co. c Bismuthi*, *Liquor Santal. Flav. c Buchu et Cubebæ*, *Mist. Damianæ Co.* and *Liquor Caulophylli et Pulsatillæ*, are prescribed almost daily by many practitioners in Australia. To country practitioners who dispense their own medicines it must be of the greatest value to have ready at hand such combinations as *Mist. Bromidi Co.*, *Conc., Mist. Hepatica Conc.*, *Mist. Pruni Virg. Conc.*, *Mist. Pepsinæ Co. c Bism.*, etc., etc., as the saving of time is considerable, and the reputation of Messrs. Hewlett is a guarantee of the quality of their drugs. The *Therapeutical Notes* show that the firm keeps fully abreast of the advances in pharmacy, as their list contains quotations for both powdered and compressed tablets of the various animal organic substances as *Cerebrin*, *Pituitary Body*, *Red Bone Marrow*, *Orchitic Substance*, *Ovarian Tissue*, etc., etc. *Serum Therapeutics* are also represented by *Antivenereum*, *Antistreptococcic*, and *Antidiphtheritic Serums*. In these days of Antiseptic precautions, Hewlett's *Antiseptic Jelly*, containing 1 in 1000 perchloride of mercury should meet a special need for lubricating the hands in

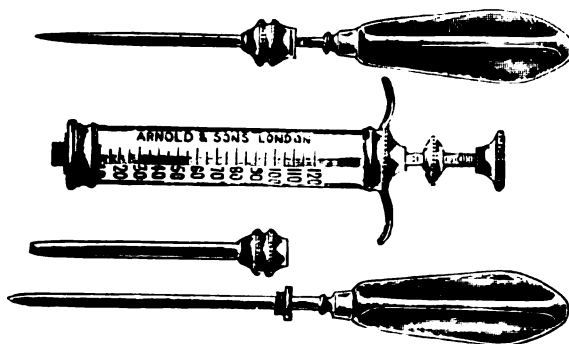
Gynaecological work and midwifery practice. It is put up in collapsible tubes scented with Otto of Roses, Eucalyptol, or Thymol, or can be obtained odourless. Petrolatine (Vaseline Oil) affords a suitable medium for the exhibition of Menthol, Carbolic Acid, Euphorphen, etc., to the nostrils and air passages.

Their *Notes on the New British Pharmacopœia* (second edition) show in a clear and concise manner the various changes, additions, and omissions introduced into that publication.

We gladly welcome Messrs. Hewlett and Son to our advertising columns (see page xiii.)

NEW INVENTIONS.

BOWEN'S HYDROCELE INJECTION APPARATUS.



MESSRS. ARNOLD AND SONS, of West Smithfield, London, have manufactured, at the suggestion of Dr. Cuthbert Bowen, of Bridgetown, Barbados, W.I., a "Hydrocele Injection Apparatus," which is superior to any instrument of the kind yet on the market.

As will be seen from the accompanying woodcut, the barrel is graduated with clear black markings, so that the exact amount of fluid drawn up is indicated, and the piston rod is similarly graduated and provided with a sliding stop ratchet, thus preventing the injection of more Iodine or Bichloride of Mercury solution than is intended. The cannula screws on firmly by threads to the syringe. It is thus impossible for a drop of the injection fluid to be lost, and what will be of inestimable benefit to the surgeon, his own fingers cannot possibly come in contact with the Iodine, as so often happens where the nozzle of the ordinary syringe does not fit perfectly into the cannula. The special feature of Dr. Cuthbert Bowen's instrument now, ever lies in the fact of the trocar screwing into the cannula and becoming incorporated with it. When the point of the trocar protrudes to the extent regulated by the threads, it will be found that the trocar and cannula are invisibly merged one in the other, and on running the finger up and down the outside of the instrument, there is an entire absence of collar.

After being in use some time, cannulas of ordinary make hang loosely on their trocars, and both surgeons and patients experience discomfort during the operation of injection.

In Dr. Cuthbert Bowen's apparatus the cannula and trocar together form an apparently solid needle, which causes the patient hardly any pain in its introduction. The projecting horns on the syringe enable the operator to use one hand to great advantage, leaving the other free for the manipulation of the part to be injected.

NEW ASEPTIC OPERATION AND DRESSING TRAYS.

SUGGESTED BY T. HOPE LEWIS, SURGEON, AUCKLAND HOSPITAL, NEW ZEALAND.

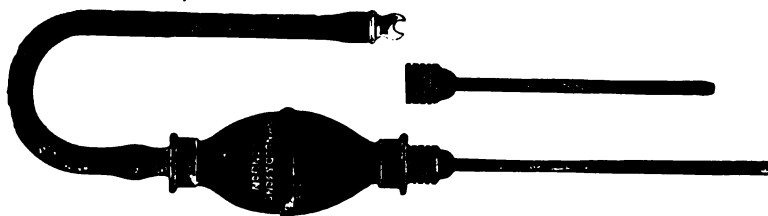


HAVING given an extensive trial to the various dressing trays usually sold and to several of my own design, I have now arrived at the most convenient and useful shape, which has been made for me by Messrs. Arnold & Sons, West Smithfield, London. The trays are made in sets of three, and all fit into one another to economise space and keep out dust.

They are made of tinned copper, and can be boiled, scrubbed, and generally made aseptic. They serve for boiling instruments in before or after an operation, while they are adapted for carrying the dressings and sponges in a moist condition to an operation. They are equally adapted for private and hospital work. They fit almost every part of the body to catch liquid at an ordinary laparotomy or operation about the inguinal canals—one tray is put between the thighs and jammed well up against the perineum, while the other two are placed close up against the loin and thigh on either side of the patient. Any amount of washing-out and sluicing the skin or operation area may be freely indulged in without wetting the table and blankets. For all operations the trays serve as instrument holders half filled with antiseptic lotion. It will be found very convenient to keep a pair with, say, the usual instruments for curettement of the uterus always stowed in them, enema, uterine tube, Hegar's up to fifteen, curettes, vulsellum, etc. Two form a dust-proof box, and can be kept on a shelf ready for instant use.

NEW GONORRHOEA SYRINGE.

SUGGESTED BY S. MALLANNAH, M.B., C.M., RANKOTE, HYDERABAD, DECCAN.



THE above current gonorrhoea syringe has the following advantages:—

1. There are opposite currents, a single forward current and several backward currents, hence supersedes all other syringes. 2. Backward currents are essential for thorough cleansing of the passage as we

find in old instruments. 3. Forward currents will irrigate thoroughly any infective material which may be pushed forward by the instrument during introduction of the pipe into the organ. 4. Pipe is made of vulcanite and so it is not liable to be affected by chemicals used. 5. Pipe can be removed from the instrument for cleansing purposes and another pipe of different length may be screwed on if required. 6. Pipes are made of different lengths—four and five inches. 7. There are grooves on the pipe to facilitate backward flow. 8. There is no bulb and the end of the pipe is smooth, round, and of the same size as the rest of the pipe. 9. It has a suction tube which feeds the ball continuously, and hence there is no need of introducing the pipe into the organ more than once for thorough cleansing.

PUBLIC HEALTH.

THE Hobart Health Officer (Dr. Sprott) reports that during August there were 59 deaths registered in Hobart. In the city there were 30 deaths—males 12, females 18—as compared with 87 for the corresponding month of last year. The death-rate for the month was equal to 12.24 per 1,000 per annum. The principal causes of death were:—Cancer, 1; phthisis, 3; old age, 5; disease of brain, 3; heart disease, 3; pneumonia, 2; burns, 2; debility, 1; tuberculosis, 1; and the remainder were of a general nature. Four of the deaths were of persons under 1 year of age; 3 between 1 and 5 years; 15 between 5 and 65; and 8 over 65 years of age. There were 73 births registered.

An epidemic of measles of a mild type is prevalent in Tasmania.

VITAL STATISTICS.

SYDNEY.—There were 1,036 births and 674 deaths registered in Sydney during August. The principal causes of death were:—Measles, 98; influenza, 10; puerperal fever, 1; diphtheria, 7; typhoid fever, 2; bronchitis, 62; pneumonia, 75; cancer, 28; phthisis, 49; scarlet fever, 7; whooping cough, 7.

MELBOURNE.—The chief causes of death in greater Melbourne during August were as follows:—Measles, 14; diphtheria, 8; cancer, 25; phthisis, 61; typhoid fever, 5; pneumonia, 102. There were in all 1,012 births and 630 deaths registered during the month.

BALLARAT.—There were 9 deaths from measles, 1 from diphtheria, 3 from rheumatism, 5 from cancer, 9 from phthisis, 9 from bronchitis, and 5 from pneumonia during the month of August. There were in all 87 deaths.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

MELBOURNE UNIVERSITY.—The following appointments of co-examiners have been made for the year 1898-99:—Medicine: Anatomy, Dr. Syme; medicine, Dr. Williams; surgery, Mr. C. S. Ryan; materia medica, etc., Dr. Bennie; therapeutics, etc., Dr. Gresswell; obstetrics, etc., Mr. Bothwell Adam; forensic medicine, etc., Dr. Mollison. Examinations: Physiology and brain, etc., Dr. Maudsley; mental pathology, etc., Dr. Fishbourne and Dr. Creery; medicine and commen-

tary, Dr. Williams; obstetrics and commentary, Mr. Rothwell Adam. Surgical operations and surgical apparatus, Mr. C. S. Ryan; surgical anatomy, Dr. Syme.

ZEEHAN HOSPITAL, TASMANIA.—Drs. J. Kennedy and Paul Guinand have resigned their positions as hon. medical officers to the Zeehan Hospital in consequence of the Board of Management allowing an unattached medical man to visit and advise patients under the care of the hospital staff. The hospital is now without an honorary staff, and patients will require to engage their own medical men. A sub-committee of the board has been appointed to devise means of raising enough funds to provide for a resident surgeon to the hospital, and their report is awaited with interest by the subscribers.

The committee of the Queen Victoria Women's Hospital, Launceston, have issued their first annual report. It shows there were fifty-two (52) patients treated with only one death. There have been 48 infants born since the institution was opened with only two deaths. The management has purchased the present building at a cost of £650, and have already paid £150 of this off. The year closed with a credit balance of £271 19s. 5d. The Hospital receives £5000 from the Guesdon bequest, and is in a prosperous condition.

BATTLE OF THE CLUBS.

A CIRCULAR signed by seven (7) of the medical men of Launceston, Tas., refusing to continue their attendance until some reform is made with regard to fees and wage limit has been sent to the various friendly societies of that city. The annual contribution per member is 12s. 6d., which includes attendances on the family up to the age of 18 years. The societies threaten to get two medical men to do all the Lodge practice—without the right of private practice—this was tried in Hobart some years ago and failed.

MEDICAL NOTES.

PRESENTATION TO A MEDICAL MAN.—Dr. C. B. Pym, the late president and founder of the Penrith Civilian Rifle Club, has been presented by the club members with a silver tray, as a token of esteem, on the eve of his departure from Penrith, N.S.W.

OBITUARY.

LEAHY, THOMAS, M.B. Univ. Dub. 1874, L. et L.M. R.C.I. 1874, died at Ashburton, Province Canterbury, New Zealand, on September 24th, 1898, aged 46 years. Deceased, who for the last fifteen years, had been living in Ashburton, was a man of the most kindly, genial, and generous disposition, and was held in the highest esteem, both as a medical practitioner and a private citizen. He was a true-hearted sportsman, and was ever ready to assist, both with his purse and by his presence. For a long time past he had been suffering from an incurable internal complaint, which ended in his death at the early age of 46 years. He leaves a widow and two daughters, for whom profound sympathy is felt.—*Lyttelton Times*.

HACON, WALTER EDWARD, M.R.C.S. Eng. 1872, L.R.C.P. Lond. 1872, L.S.A. Lond. 1873, died at Christchurch, New Zealand, on September 27th,

1898, aged 47 years. Between four and five o'clock in the afternoon, Mrs. Hacon, finding him still sleeping became alarmed about his condition, and sent for Dr. Mickle, who found him quite unconscious. Seeing that it was a very grave case Dr. Meikle suggested a consultation, which was held with Drs. Anderson and Stewart. The three medical gentlemen did all in their power to rally the patient, but he never regained consciousness, and died at nine o'clock that night, the cause being apoplexy. His father is a doctor, 80 years of age, living in London, and still in practice. Dr. Hacon had a very successful career as a student at Guy's Hospital, London, and in addition to taking the ordinary M.B.C.S. degree, passed the first examination for the Fellowship. He was house surgeon at Bedford Hospital, and assistant medical officer at the Warwick County Lunatic Asylum, and held other appointments. He came to New Zealand in 1879, and was appointed to the post of medical superintendent of the Sunnyside Asylum. On the outbreak of the Maori disturbances at Parihaka in 1880, he joined the armed constabulary, at the request of the Government, as surgeon. He retained his position as medical superintendent at Sunnyside until 1887, when the Government wished to remove him to the Wellington Asylum. As this involved a reduction in salary, he looked upon it as an act of injustice, and refused to accept the post. He then entered into private practice in Christchurch. He was a very kind and successful practitioner, and took a very keen interest in matters of public health and questions of social reform, contributing much information at different times on these subjects to the newspapers and local public bodies. In his own particular department of mental disease he was recognised as an authority, and while he was in charge of the Sunnyside Asylum he carried out his duties efficiently and conscientiously. He took a very active part in the establishment of the Christchurch centre of the St. John Ambulance Association, and his laudable efforts in this direction were recognised by the parent society. In 1884 Dr. Hacon married Miss Margaret Campbell, of Wellington, and leaves a widow, two sons and one daughter to mourn their loss.

THOMAS MEIN AUSTIN, L. and L. Mid., R.C.S. & R.C.P. Edin., 1864, late of Kerang, Vic., died on September 15th at Bendigo, Vic. Deceased was a colonist of thirty-three years' standing.

JAMES DOWNIE, L.F.P.S. Glasgow, 1877, who has been practising at Mathinna, Tas., for the past two years, was found dead in his bed, with an empty chloroform bottle beside him, on September 27th. At the inquest held on the 30th Sept., a verdict of "death by misadventure from inhaling an overdose of chloroform" was returned.

MILITARY INTELLIGENCE.

NEW SOUTH WALES.—The *Defence Force Gazette*, published on 30th September, notifies that the following alterations in nomenclature have been approved:—Medical Staff Corps (permanent establishment) to be in future New South Wales Army Medical Corps, permanent section; Medical Staff Corps (partially-paid establishment) to be in future New South Wales Army Medical Corps, partially-paid establishment; honorary officers of the Medical Staff Corps to be in future officers of New South Wales Army Medical Corps, volunteer establishment. Medical Staff Corps

Reserve to be in future New South Wales Army Medical Corps Reserve. Consequently upon this the following alteration will be made in the ranks of the medical officers, viz.:—Surgeon-colonel to be colonel, brigade-surgeon lieutenant-colonel and surgeon lieutenant-colonel to be lieutenant-colonel, surgeon-major to be major, surgeon-captain to be captain, surgeon-lieutenant to be lieutenant.

Surgeon-lieutenant Walton-Smith has been appointed surgeon-captain.

The undermentioned officers, having concluded the headquarters course of the Medical School of Instruction, have been passed as follows:—Surgeon-lieutenant T. M. Martin, Medical Staff Corps (with honours); Surgeon-captain A. E. Perkins, Medical Staff Corps; Surgeon-captain F. Milford, Medical Staff Corps; Surgeon-Lieutenant C. A. Edwards, Medical Staff Corps; Surgeon-lieutenant F. W. Hall, Medical Staff Corps; Surgeon-lieutenant G. Lane Mullins, Medical Staff Corps; Surgeon-lieutenant G. S. Samuelson, Medical Staff Corps; Second-lieutenant E. J. Beauman, Medical Staff Corps; Surgeon G. J. L. O'Neill, Naval Brigade.

NEW ZEALAND.—The following appointments have been gazetted:—*Third Battalion, Wellington (East Coast) Rifle Volunteers*: Surgeon-captain Benjamin Locking, Napier Rifle Volunteers, to be Medical Officer, with his present rank. *Waimate Rifle Volunteers*: Herbert Clifford Barclay to be surgeon-captain.

CHANGE OF ADDRESS, ETC.

ALTMANN, Dr. CHARLES AUGUST, late of South Australia, has succeeded to the practice of Dr. C. N. Simons, at Bright, Vic.

ARMSTRONG, Dr. HUGH, late of Hay, has succeeded to Dr. J. S. Wilson's practice at Tamworth, N.S.W.

BLACKBOURNE, Dr. G. H. S., has settled at Goon-garrie, W. A.

CHEESMAN, Dr. H. H., has commenced practice at Coromandel, N.Z.

CHESSON, Dr., has not settled at Bungendore, as notified, he is now at Picton, N.S.W.

COOPER, Dr. H. W., late of Wyalong, has settled at Sofala, N.S.W.

CRAGO, Dr. W. H., has removed from No. 34 to No. 16 College-street, Hyde Park, Sydney.

CROWLEY, Dr. C. G., late of the Melbourne Hospital, has removed to the Women's Hospital, Melbourne, he having been elected assistant resident surgeon.

DUNDAS, Dr. M. G., a recent arrival, has succeeded to Dr. C. B. Pym's practice at Penrith, N.S.W.

FINLAY, Dr. HUNTER, has removed from Townsville to Cairns, Q.

GRAY, Dr. COLIN, late of the Bendigo Hospital, Vic., has removed to Denmark, W. A.

HILL, Dr. R. H., a recent arrival, has settled at Isisford, Q., he having been appointed to the local hospital.

HEARNE, Dr. W. W., late of Outtrim, has taken a post at the Prince Alfred Hospital, Melbourne.

LAURIE, Dr. H., has commenced practice at Kanowna, W. A.

LITTLE, Dr. J. H., has removed from Brisbane to Armidale, N.S.W.

answering the two questions which arise in the practical part of a surgeon's work.—First: What is the disease or injury? Second: What is the proper treatment? The subjects of the principles of surgery, of surgical pathology, and of surgical bacteriology are put aside in order to give the student and practitioner a single volume containing the most important part of practical surgery.

The various chapters, seventeen in number, deal with the examination of the patient and the injuries and diseases of the various systems, the diagnosis and treatment of syphilis and of tumours, while the final chapter is devoted to a description of the Röntgen Rays in Surgical Diagnosis.

As a text-book it is up to date and contains all the essential points in practical surgery. The illustrations, some of which are coloured, distinctly add to the value of the work. The volume is well written and well arranged, and is worth a close study.

The volume is produced in Mr. Saunders' best style.

CLINICAL MANUAL OF MENTAL DISEASES. By A. Campbell Clark, M.D., F.F.P.S.G., Mackintosh Lecturer on Psychological Medicine, St. Mungo's College, Glasgow; Medical Superintendent of Lanark County Asylum, Hartwood. London: Baillière, Tindall and Cox. Sydney: L. Bruck.

This volume is intended for general practitioners and students, and, therefore, pathological teaching is omitted owing to the diverse views held by many well known writers.

The introductory chapter—on Mental Constitution—is so pleasantly written that the reader is forced to think well of the work and to become interested. Twenty chapters in all dealing with the various diseases of the mind, bring before us most of the forms of mental disease we are likely to meet with in our daily work. This is not a book for the specialist, but the young practitioner must derive considerable benefit from a close study of it.

Works on mental disease are so often dry reading that the tired brain of the over-worked reader is unable to assimilate their contents, but this cannot be said of Dr. Clark's book which is written in such a pleasing manner as to attract the attention and hold it from the beginning to the end.

We are very much pleased with the general "get up" of the volume, the type and the illustrations.

It is one of Messrs. Baillière, Tindall and Cox's well known University Series.

LA DIPHTHERIE is the second manual of the series of **LES ACTUALITES**, published by Baillière, of Paris. It is by Drs. H. Barbier and G. Ullmann, and covers the whole field of its object—bacteriology, clinic, prophylaxis and treatment, up to date.

The authors teach the following: The true bacillus of diphtheria is recognised as no other than Loeffler's long, tufted and entangled. This, it is declared, may invade the patient's system and be found in the viscera as well as in the false membranes. When in the presence of other microbes its action is modifiable and associated symptoms are revealed. Simple and complicated diphtheria are distinguished by signs as clear as stigmata.

Simple Diphtheria.—White false membrane detachable in shreds; mucosa normal or pale; glandular affections slight or absent; complexion pale, anæmic and earthy; pulse rapid; no purulent secretion.

Complicated Diphtheria.—Face puffy or cyanotic; complexion leaden; nares and lips excoriated; mucosa

red, sanious, bleeding and swollen; false membrane pulpy and putrescible; neck swollen; secretion abundant. Unmodified types of the disease with slight septic accompaniments, range between those two extremes. In no case can the condition of the throat be considered an indication of the gravity of the disease.

The difference in type should be borne in mind, inasmuch as the special anti-toxin (all powerful against simple diphtheria) is ineffectual against a complicated case.

The proved persistence of Loeffler's bacillus after an apparent clinical cure, is a serious danger which must be provided against by isolation and disinfection during convalescence.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Sanders, Robert Corles, Lic. R. Coll. Surg. Irel. 1882.
Graham, Walter Robert, Lic. R. Coll. Phys. Edin. 1896; Lic. R. Coll. Surg. Edin. 1896; Lic. Fac. Phys. & Surg. Glasg. 1896.
Dundas, Mordaunt George, Mem. R. Coll. Surg. Eng. 1888; Lic. Soc. Apoth. Lond. 1884.
Corlis, Charles Christopher, M.D. Ohio Wesleyan Univ. Del. Ohio, U.S.A. 1896.
Macfarlane, Aylmer Alexander, Lic. R. Coll. Phys. Edin. 1896; Lic. R. Coll. Surg. Edin. 1896; Lic. Fac. Phys. & Surg. Glasg. 1896; Lic. Soc. Apoth. Lond. 1892.
Ghandy, Rastainji Dinshaji, Lic. Soc. Apoth. Lond. 1881; Lic. Fac. Phys. & Surg. Glasg. 1882.

For Additional Registration.

Flashman, James Froud, M.D. Univ. Sydney 1897.

NEW ZEALAND.

Cheesman, Herbert Hilton, M.R.C.S. Eng.; L.R.C.P. Lond.

TASMANIA.

Von See, Heinrich, State Med. Exam., Schwerin, Germany, 1894.

VICTORIA.

Clark, William Goodwin Chadbourne, M.D. Boston, U.S.A., 1886.

Name Restored to Register.

Altman, Charles August, M.B. Melb. 1883.

WESTERN AUSTRALIA.

Macaulay, Samuel, M.R.C.P. Edin.; L.F.P.S. Glas., 1880.
O'Meara, Patrick Michael, M.B. B.S., Royal University, Ireland 1897.
Mackenzie, Andrew Hardie, M.B. Melbourne.
Gray, Colin, M.B. 1894, B.S. 1895, Melbourne.
Blackbourne, George Hugh Spencer, M.B., B.S. Melbourne 1897.
Laurie, Henry, M.B., B.S. Melbourne 1897.
Sawell, Frank Leslie Fownall, M.R.C.S. England, L.S.A. 1896.

BIRTH, MARRIAGE AND DEATHS.

BIRTH.

BLAXLAND.—On the 28th September, at Park-avenue, Burwood, N.S.W., the wife of Dr. E. G. Blaxland, of a daughter.

MARRIAGE.

WALKER-SMITH-ANDREWS.—On the 14th September, at Waverley, N.S.W., by the Rev. Thomas Steele, M.A., Corowa, Dr. Walker-Smith, Glebe, Sydney, to Elizabeth, youngest daughter of the late Andrew Buchanan, and widow of the late W. P. Andrews, both of Glasgow, Scotland.

DEATHS.

FITZGERALD.—On the 16th September, at her residence, Parkington-street, St. Kilda, Vic., Eleanor Mary, widow of the late Dr. J. P. Fitzgerald, of Shepparton.—*R.I.P.*

KANE.—On the 5th October, suddenly, at Brisbane, Jessie, wife of Dr. R. E. Kane, late of Balil.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

TABES DORSALIS, AFFECTING CHIEFLY THE UPPER LIMBS— GASTRIC CRISES—EPILEPTIFORM SEIZURES, FOLLOWING THE IN- JECTION OF MORPHIA.

BY A. JEFFERIS TURNER, M.D. LOND.,
BRISBANE.

THE patient first came under my notice in September, 1896. He was then thirty-five years of age. In his younger days he had had some reputation as an athlete, being a well-known footballer and swimmer. He had never been ill before. His wife informed me that he had worried himself very much over the death of a child some three years before, and had never been himself since. Two years before he had some stiffness of the right little finger, which he attributed to resting it on the iron lamp-support of his buggy every time he alighted. It gave him some trouble in writing.

The condition, when first seen, had dated back some six months, during which he had had numbness of the right hand, and difficulty in writing. This preyed on his mind, as he feared he would be incapacitated from business. For two months he had had numbness of the left hand. For six months he had had to ask his wife to button his collar. He had also had inco-ordination of the arm movements, so that he had difficulty in shaking hands, doing so clumsily, and found that he could not enter a tram-car in motion, as his hands would not promptly go as he intended. In drinking he used to hold the tea-cup with both hands. On the other hand he had had no difficulty in walking. There had been no disturbance of the sexual functions. Occasionally he had had "rheumatic" pains in the arms, and once or twice had had shooting pain and tingling as though a nerve had been struck.

On examination the inco-ordination of movements of both hands was well marked. Writing was very difficult, and accompanied by spasm of the small muscles of the hand. He was very clumsy in buttoning his waistcoat, also in picking up a pencil with either hand. There was no wasting of muscles. With his eyes closed and feet together he swayed but slightly. Knee-jerks were absent. Sensation was impaired somewhat over both hands to light touch, most markedly in the third and fourth

digits. Sensation of pain and heat appeared normal. He walked steadily and well.

The diagnosis I formed was, in the first place, a neuritis affecting the nerves, or nerve-tracts of muscular and tactile sense, more particularly of the arms, and secondly, I considered that the affection was an unusual variety of tabes dorsalis (locomotor ataxy), in which the nerve-tracts of the arms, and not the legs, were the main parts affected. Such cases are said to be very rare.*

With regard to etiology, he stated that he was temperate, averaging one glass of whisky a day, and I saw no reason to doubt his statement. He smoked a quarter-pound Navy cut tobacco per week. Fifteen years ago he had had gonorrhœa, but had no knowledge of ever having had chancre or syphilis. He used, however, at that time to expose himself to contagion during drunken spree, and readily admitted that he might have contracted the disease. I think this is probable, as syphilis is by far the most common cause of tabes, and no other cause is discoverable in his case. At the same time there is no positive evidence of syphilis either in himself, his wife, or his children.

He was ordered a long holiday, and a course of mild mercurial treatment, firstly, hydrarg. c. cretâ tabloids, and secondly, perchloride of mercury with iodide. After five weeks he returned much improved in general health, but his hands appeared as clumsy as ever. The pains had disappeared, and he thought he guided the movements of his arms (not hands) better; also, when he woke in the morning he knew how his arms were lying before he opened his eyes, a thing which before he could not do. The knee-jerks remained absent. Treatment continued as before.

In December there was no change. Tingling and numbness in the hands were still marked. It was particularly noted that he walked well without a trace of ataxy in his gait.

April, 1897.—Last night had shooting, throbbing pains in arms below elbows, preventing him from sleeping. He has not had these pains for many months; formerly they used to be frequent. He stands steadily with eyes shut, but says he does not walk so well in the dark as he used to do. Sensation of right hand was tested, patient's eyes being shut. It was found that a light touch was frequently not felt, and when felt was wrongly located.

*Gower's Diseases of Nervous System, Vol. I., article Locomotor Ataxy.

In May he for the first time complained of his legs. He said that when he stumbled from stepping on a stone, or other cause, he did not recover himself so easily as he used to do. His knees, too, had a tendency to give way.

In June he had what appeared to be a gastric crisis. The immediate cause was two glasses of port, a glass of whisky, and some mutton-pie. The attack was accompanied by intense epigastric pain, only partly relieved by vomiting. He then told me that twelve months earlier he was taken sea-sick while out schnapper fishing. The sickness was accompanied by the same pain, furthermore it continued all the way up the river, and he had to be assisted home. Sea-sickness never used to affect him in this way; formerly it was not accompanied by pain, and ceased as soon as the cause was removed. He was at this date put on a course of arsenic.

In August it was noted that the pupils were small, and showed scarcely any reflex to light. This condition had probably been present earlier.

January, 1898.—He got wet through, and next day complained of shooting pain in arms and legs and round chest (girdle-pain).

September 6th, 1898.—Since last date he has had a trip up north, which did his general health good, though he had a gastric crisis in Townsville, which was relieved by morphia, gr. $\frac{1}{4}$.

He has been vomiting all day, and suffering from extremely severe epigastric pain. He is now continually groaning and retching. Morphia, gr. $\frac{1}{4}$, followed after an interval by gr. $\frac{1}{8}$, gave relief.

September 7th.—Had good night's sleep, but symptoms recommenced on waking. Morphia, gr. $\frac{1}{4}$, failed to relieve, so twenty minutes later I gave another $\frac{1}{8}$ gr., which gave partial relief. As he seemed better I had left the room, when I was suddenly called back to find him cyanosed, and not breathing. I commenced artificial respiration, but he soon regained consciousness. He complained still of some pain, but slight.

In the evening he was much better, his pulse was good, and he had no pain.

September 8th.—Early this morning the symptoms recommenced worse than ever. I felt compelled to give him a $\frac{1}{4}$ gr. of morphia, which failed to relieve. An hour later, as he was still in great agony, and frequently violently retching, I gave him another $\frac{1}{8}$ gr. with some trepidation, and then watched him carefully. The pain was not relieved, although the morphia was having some effect, for it became intermittent. During the intermissions, which lasted half a minute, breathing completely ceased, he then sighed, contorted his features, groaned,

sometimes muttered "this is awful," when another intermission succeeded. The pulse remained regular, ninety to the minute all through, and he was always conscious, for if I spoke to him he responded.

Just one hour after the second injection, after one of these cessations of respiration, he became suddenly rigid all over and deeply cyanosed. The general rigidity lasted only a few seconds, that of the jaws and respiratory muscles considerably longer. At length, by passing the handle of a spoon behind his tongue and pressing this forward, breathing was excited. It was not continuous, so that I repeated this manœuvre several times, though on the last occasions he gave evidences of consciousness, which rapidly returned. He then said the pain was much better, though not absent. He was given 40 gr of bromide of potassium by the rectum. In the afternoon he had a slight seizure, which I did not see. In the evening he was better. The bromide was repeated.

From this day he improved. On the 13th he was much better, but complained of a curious pain during defæcation, a sort of painful constriction working upwards till it reached the waist. This pain had, he said, preceded the present crisis for several days.

On the 15th he came to my surgery, saying he felt well. His pupils do not react to light. His hands remain as before. There is slight swaying when he stands with his feet together and eyes shut, but little more than normal; he walks well. His condition appears almost the same as when I first saw him two years ago.

Some day I intend to publish a sequel to this case, but as he may live many years yet, I have thought it worth while to place this much on record.

On October 24th commenced another crisis, which lasted a week. Although severe, it never reached the intensity of the last. He was given no morphia, and had no epileptiform seizure. Phenacetin in five-grain doses frequently repeated seemed to give partial relief to the pain, enabling him to sleep at intervals, but on awaking the pain recommenced. It had little effect on the vomiting, and much of the drug was returned.

The points of interest are: firstly, the excessive development of the symptoms in the upper limb; secondly, the severe gastric crises culminating in epileptiform seizures. These are, according to Gowers, rare in tabes, and may prove fatal. In this instance they followed the injection of morphia, and this sequence followed so exactly similarly on two successive days that

I cannot think it accidental. The patient's agony was so extreme on the second occasion that, though fearing the result, I did not feel justified in withholding the drug. It is curious that, until the convulsion occurred, the morphia failed to give relief.

EMPHYEMA: ITS ETIOLOGY AND TREATMENT.

BY W. T. HAYWARD, M.R.C.S., L.R.C.P.I.,
MEDICAL OFFICER TO THE ADELAIDE
CHILDREN'S HOSPITAL, LECTURER ON
CLINICAL MEDICINE, ADELAIDE UNIVERSITY,
ADELAIDE.

BEFORE discussing the subject of empyema it will be well to thoroughly understand the meaning we attach to the term. Empyema is described as a "collection of pus within the pleural cavity," and in the majority of the textbooks it is treated under the heading of "pleurisy," which I consider to be misleading. Accumulations of pus in the pleural cavity may result from external injury, such as a wound implicating the pleura, which has become septic; it may follow a fractured rib which has lacerated the lung, producing primarily a pneumothorax; it may be caused by the rupture of an abscess, tubercular or otherwise, into the pleural cavity, and my friend and late colleague Dr. Giles will support me when I say, that while we were colleagues at the Adelaide Hospital, in not a few cases operated upon there, the pus in the chest was found to be due to the rupture of a suppurating pulmonary hydatid cyst into the pleural cavity. Empyema may result from septic infection, produced by improperly performed tapping or aspiration in cases of serous pleural effusion, but I do not believe that a simple effusion ever becomes purulent unless it is infected by outside agencies. The cases that we meet with, especially amongst children, are, in my opinion, due to an altogether different cause, and it is to this latter class of case that I propose to reserve the term "empyema."

For many years I have been interested in this subject, and my doubts as to the usually accepted etiology being correct are not of recent date. I found that in all my cases, when I could exclude the above-mentioned causes, there was always the history of an acute pneumonia. Briefly, the history of a typical case may be given as follows:—An attack of acute croupous pneumonia running the usual

course. After the usual fall the temperature continues about normal for from five to ten days, when a slight rise occurs, but seldom reaching 101° ; though the patient improves at first, his condition soon becomes stationary, though he suffers from no marked symptoms; meanwhile the physical signs over the affected side do not clear up. After a period ranging from one to three weeks, signs of a pleural effusion are evident. If a hypodermic needle be inserted in the early stages it is probable that no fluid will be withdrawn, if at a later date, there may be a slightly turbid fluid, and if still later, a puriform fluid is withdrawn.

This is a very different history from that of a case of ordinary serous pleural effusion, where one finds the onset gradual, the symptoms and signs increasing in intensity; in the earliest stages when the presence of signs of pleuritic effusion are manifested, the insertion of a hypodermic syringe needle will reveal the presence of a serous fluid, moreover, it will only have to be inserted a short distance before the fluid is reached (whereas in the earlier stages of empyema the same needle deeply inserted will fail to tap the fluid). Then again the character of the two fluids differ. In pleuritic effusion we have a straw-coloured fibrinous fluid, clear and translucent, with no definite microscopical appearance, except, perhaps, for the presence of a few leucocytes, and when examined bacteriologically no bacteria can be found. In the earliest stages of empyema the fluid is found to be thin, watery, and more or less turbid; under the microscope leucocytes are to be found in a greater or lesser degree, and when examined bacteriologically a pure culture of the diplococcus is always to be found.

In *post mortem* examinations of patients who have died from acute pneumonia, large masses of fibrinous exudation are often found covering the affected portions of the lung; they are of varying thickness, from, I should say, one-sixteenth to half an inch; sometimes they cover the lung, at others they may appear as streaks; frequently there is a layer at the base of the lung; they are more or less easily detached from its surface, leaving it smooth; their consistence is fairly firm. Everyone who has opened a chest for empyema must have noticed the masses of fibrinous material that come away with the pus. If the case is operated upon early, the masses are large and fairly firm, if at a later date, they are much softer, and the pus is thicker; if the case is of long duration, only slight traces of them are to be found, and the effusion has all the characteristics

of ordinary pus. If in the last case the pleural cavity is thoroughly emptied and equally thoroughly douched, the subsequent discharge, unless otherwise infected, is serous and not puriform.

These facts, which I have carefully verified, both at the Adelaide Hospital and the Children's Hospital, during the last ten years, have given me confidence to express the opinion that empyema is not due to the serous effusion of pleuritis becoming purulent, but occurs in certain cases of acute croupous pneumonia where the pneumococcus producing that disease causes an exudation to be formed on the pleural surface; that in many cases this exudation is not absorbed, but is gradually liquefied and disintegrated, a puriform liquid being formed. Probably also, in the later stages, this process induces an irritation of the pleura, leading to increased effusion, thus accounting for gradual increase of fluid in the chest. During the last three years my friend and colleague Dr. Borthwick has bacteriologically examined the fluid obtained from every case of pleural effusion that has come under my observation. In cases of simple pleural effusion no bacteria have been found. In every case of empyema, when the chest had not been previously aspirated, he obtained only a pure culture of the pneumococcus. In one or two cases in which there had been a previous aspiration, staphylococci were present in addition to the pneumococci. If empyema is due to the serous effusion of pleuritis becoming purulent, that condition must be brought about by the presence of pus forming micro-organisms, but I have shown that in my cases these germs were conspicuous by their absence. I have shown that in acute pneumonia fibrinous masses on the surface of the lung are common, and that similar fibrinous masses are present in the early stages of empyema.

It is almost universally recognised that acute croupous pneumonia is caused by the pneumococcus. I have shown that the pneumococcus is practically the only germ present in empyema. The pneumococcus has no part in the causation of pleuritis, and it is not present in the serous pleuritic effusion. In every case of empyema that has come under my notice, omitting those caused by hydatid or pulmonary abscess, there has been a history of immediate antecedent acute pneumonia. In the Adelaide Children's Hospital there have been thirty-three cases of empyema admitted during the past ten years, in twenty-six there is a history of antecedent pneumonia (sometimes described as pleuro-pneumonia), "low fever" once, "pleurisy" once—in this case the

child had been tapped three times before admission; in the other five cases no definite history is given. I consider that these statistics support my contention.

On etiological, clinical, pathological and bacteriological grounds, I submit that the form of empyema which I am now discussing is a disease either accompanying or following acute croupous pneumonia, and caused by the same micro-organism, the diplococcus pneumoniae.

Having satisfied myself that in cases of empyema we have not a large abscess cavity, with walls secreting pus, but a cavity the walls of which are fairly healthy, but which contains a mass of exudation material in various stages of liquefaction, it occurred to me that this change of opinion necessitated a change in the rationale that governed the treatment of the disease. It seemed to me, that if the affected pleural cavity could be thoroughly emptied of its exudation contents, and no noxious germs admitted, resolution ought to occur straight away, and that empyemata drained for weeks and months should be things of the past. The treatment of my cases for the past four years has been governed by this idea. If it were possible to completely remove the whole of the fibrinous exudation, I believe it would be perfectly safe to close the opening in the chest-wall in operation for empyema, and treat the wound as an ordinary skin incision. I tried this method in two cases with unsuccessful results, and I had to re-open the wound in the course of a week or two and insert the drainage tube. Success may not be easily obtainable, but I believe the principle to be correct. It is quite possible that in the above cases the object could be obtained by repeated aspirations; as the exudation liquefies withdraw it and continue to adopt the same measures as long as evidence of the presence of fluid is present. There are several cases on record in which even a simple aspiration has met with successful results. The objection to this method of treatment is that it is impossible to withdraw the whole of the effusion, even if the case is one in which the exudation has entirely liquefied, a certain residuum is left, which is a tempting pabulum for any stray bacteria, and a diplococcal empyema may thus be converted into a more serious form of the same disease. My method of treatment will perhaps be best exemplified by reading brief notes of my last two cases; both children have been shown at our meetings during the last six months:—

H. S., *et.* 6 years; admitted into the Adelaide Children's Hospital on December 4th, 1897, suffering from pneumonia. Developed

empyema. December 18th: About two inches of eighth rib removed, and medium quantity of purulent fluid removed with masses of lymph. Pleural cavity freely doused with sterilised water. Large sized drainage tube inserted. Wound partly closed with sutures. Dressed with sterilised gauze and absorbent wool. Dressing changed the same evening. December 19th: Dressed because of serous soakage. Tube removed and not reinserted. Not dressed again till December 25th. Stitches removed. The only discharge was from granulation tissue. Recovery uninterrupted.

P. Q., *et. 4.* Admitted into the Adelaide Children's Hospital, April 14th, 1898, suffering from pneumonia. Developed empyema. April 24th: Portion of rib removed. A large quantity of thick, curdy pus, and a few soft shreds of fibrinous material evacuated. Doused with sterilised water. Drainage tube inserted. Wound partly closed with horsehair sutures. Sterilised dressings. 7 p.m.: A good deal of soakage. Outer pad of dressing changed. April 25th: Redressed; no pus, but a little serous soakage. April 27th: Tube removed; no pus. Recovery uninterrupted.

Here we have examples of two typical cases of empyema, in one of which the drainage tube was removed on the second day after the operation, and the other on the fourth; in neither case was reinsertion called for. After the first twenty-four hours the dressings were only changed on two or three occasions, and then only as a precautionary measure. I do not wish it to be understood that all my cases treated in this manner have been equally successful; in more than one case I have had to reinsert the drainage tube at the end of a week or a fortnight owing to evidence of re-accumulation of the fluid and the supervention of febrile symptoms; in one case, after twice allowing the tube to remain out for a week, I found that, at the end of three weeks, there was still evidence of the presence of pus in the chest. I then reopened the wound and thoroughly irrigated the chest; I did not, on this occasion, reinsert the tube, nor did I close the wound. There was no subsequent re-accumulation of fluid, and the child made a rapid recovery. I have recorded the above cases to show the favourable results that may be obtained. The most unsuccessful result that I have had since adopting this method of treatment has compared favourably with the results I formerly had under what I may term the orthodox treatment. Why all cases are not equally successful can be explained on the assumption that at the time of operation

masses of fibrinous exudation are allowed to remain attached to the lung, it is not easy to irrigate effectually the whole surface of the pleura through a small opening at the base of the chest; it is no uncommon circumstance, after the fluid has been running clear for some time, for a mass of exudation to appear at the wound, followed by a flow of pus. If such a mass is allowed to remain in the chest, the process of liquefaction will continue to proceed as it did in the other masses prior to the operation. It may fairly be argued that if, as you say, you cannot be sure of removing what may be termed the pus-forming material at the primary operation, would it not be well that a drainage tube be allowed to remain in the chest a sufficient length of time to permit this material to break down, and the pus to drain? In reply, I would say that it is worth while to take the chance that complete removal has been accomplished; that if such had not been the case, there is still a very fair chance that, owing to the irrigation, the potency of the pneumococcus has been greatly weakened or destroyed, and that the improved health of the patient will allow nature to complete the cure by absorbing the liquefied material.

Cases undoubtedly occur in which absorption of fluid occurs without operative procedure. Moreover, should this not occur, and should febrile symptoms appear, the reopening of the wound and effective irrigation is a very simple proceeding. But the chief argument is that by this method we avoid the danger of the drainage tube; it is a most difficult matter to keep the case aseptic; it is almost impossible to prevent an inrush of air into the chest during the dressing of the wound, and the result is that instead of a cavity containing a fairly innocuous pus we have a suppurating cavity with septic pus.

In discussions on empyema the question of the advisability of washing out the chest is usually brought up. Many surgeons strongly object to the practice. I can only say that I invariably do so, and have always done so. I look upon it as an essential part of the treatment, and I have never once had reason to think it ever otherwise than beneficial. Care, of course, should be taken that there should be an easy exit for the fluid injected.

With the experience gained with the comparatively few cases of empyema that come under observation in the course of three or four years in a small community, it would be absurd to attempt to dogmatise, but from a careful study of about twenty cases that have come under my immediate observation during

that time, I have drawn the following deductions, which I submit for your consideration:—

The disease known as empyema is not a sequel to "pleurisy with effusion."

That it always either accompanies or follows "acute croupous pneumonia."

That it is due to a plastic inflammation of the pleura, caused by the pneumococcus pneumoniae.

That prolonged drainage is unnecessary for its efficient treatment.

That the most effective treatment is to freely open the chest, thoroughly irrigate and remove the fibrinous masses, dress as frequently as may be required during the first twenty-four hours, remove the drainage tube, and not dress again for a week. Should signs of fluid be then present, reopen the wound, and thoroughly flush the chest and dress as before.

I wish to express my indebtedness to my present House-Surgeon, Dr. H. M. Evans, Dr. H. O. Irwin, and Dr. Borthwick, for the assistance they have rendered me.

NOTE ON THE BACTERIOLOGY OF EMPYEMA.

By THOMAS BORTHWICK, M.D. EDIN., HON. BACTERIOLOGIST, ADELAIDE CHILDREN'S HOSPITAL.

DR HAYWARD has asked me to contribute a Note on the Bacteriology of Empyema as a sequel to his paper, so I shall confine my remarks as much as possible within the scope of his paper.

(1) Empyema has been described by various authorities associated with a variety of pyogenic bacteria, as the strepto or staphylococci, the tubercle bacillus, etc. Unfortunately these statements do not give the history of the cases in respect to previous treatment—that is, as to whether they had been previously interfered with by tapping. One can easily understand—and my observations bear it out—that if this had been done foreign bacteria might be introduced; and, as most of the observations were made in cases sent into hospital, there is a probability that many of them had been previously interfered with. Again, these authorities do not say which variety of empyema they were dealing with; if it were, for instance, the result of a ruptured lung abscess, there would of necessity be various pyogenic bacteria present. As it is, to take Netter's figures, we find a large proportion of his empyemata associated with the pneumococcus alone, namely, 53.6 per

cent. in children and 17.3 per cent. in adults, or 32 cases out of a total of 109.

I have made these criticisms to show that the statements referred to do not render Dr. Hayward's contention untenable, namely, that the form of empyema to which he refers is always associated with the pneumococcus. My observations confirm this, for all the cases examined by me, when they had not been previously interfered with, showed the pneumococcus alone. This was proved by staining the pus, and by culture experiment.

(2) If we consider the life history of the pneumococcus, it supports Dr. Hayward's contention that the empyema always is associated with pneumonia. This micro organism is frequently found in the mouth and nose of healthy persons. It probably lives there as a saprophyte on the dead foreign matter and secretions to be found in these localities, and only becomes pathogenic under certain conditions, such as an increase in its virulence or a decrease in the vitality of the living tissues, or both acting together. Now, in order to attack the pleura it must not only reach it, but penetrate it; it may reach it through the respiratory passages or through the lymphatics, but so far as we know a healthy serous membrane is impervious to bacteria. This compels us to pre-suppose a pleural membrane in a diseased condition, or at least one of lessened resistance, and such an antecedent condition where the pneumococcus is concerned would of necessity be pneumonia. The natural order of events would be increased virulence of the pneumococcus and lessened resistance of the tissues, pneumonia with impaired pleural membrane, penetration of micro-organism through membrane, with the result that local action is set up on its surface.

(3) The pneumococcus is closely associated with the process of fibrinous exudation so characteristic of empyema. This is seen in pneumonia where the air vessels contain fibrinous exudation; and the purulent fluid of the empyema may be likened to the purulent expectoration and the abscess formation, which sometimes occurs in a consolidated area, in some of which latter the pneumococcus occurs without the presence of other pyogenic bacteria. Inoculation experiments on animals also show prominently this fibrinous exudative action. If a very susceptible animal be inoculated, it dies rapidly of septicemia; but if a less susceptible animal be employed, or if an attenuated culture be used, there is considerable fibrinous infiltration at the point of inoculation, and pneumonia with effusion of lymph on the pleural and peritoneal surfaces may occur.

(4) I shall now refer to some facts in the life history of the pneumococcus which have a bearing on the treatment suggested and carried out by Dr. Hayward. When cultivated artificially it rapidly loses its virulence, and soon also its vitality, and it refuses to grow altogether on an acid medium. It is killed by a temperature of 52° C. with an exposure of ten minutes, and it is very susceptible to germicidal agent. These facts show that the pneumococcus is rather delicate under abnormal conditions, and it is possible that the opening of the chest with the consequent exposure of the pleural cavity may be abnormal enough to exert a deleterious influence on its vitality. We have an analogy in the effect of opening the abdominal cavity in tubercular disease. It is thus conceivable that if the pleural cavity can be fairly completely emptied of its fibrinous contents the action of the pneumococci which are left might be so weakened as to permit of the wound being closed at the time of operation. Then, the facts that it refuses to grow on an acid medium, and is so easily killed by germicidal agent, point in the direction of using acid or antiseptic lotions, instead of simple sterilised water for washing out the cavity.

A CASE OF EMPYEMA.

BY BENJ. POULTON, M.D., ADELAIDE.

At the August meeting I showed a patient who had been the subject of empyema, following an injury, and as the case presents several points of interest I will, with your permission, relate it in detail.

An old labouring man T. W., aged about 70 years, consulted me on the evening of July 8th, complaining of pain in the left side of the thorax and abdomen. He said that six days previously he had been kicked in the chest by a horse, that he took little notice of the injury until next day, when he had a difficulty in getting up on account of a "heavy pain" in the chest and left side. When he did get up he could scarcely walk. During the following three days he travelled a distance of about thirty miles from Blumberg to Adelaide, walking a little way, but being mostly carried in passing vehicles. He went to a hospital, was admitted, and on the third day discharged, and so came on straight to me.

He was breathing hurriedly, his pulse was weak, 120 to the minute, and the temperature normal. There was some cough. I found absolute dulness on percussing the left thorax

posteriorly in its lower half, and in the sub-axillary region. The respiratory murmur in these parts was very faint. There were no audible adventitious sounds over any part of the chest.

I found no evidence of bruising of the chest wall, nor of rib fracture, and concluded that there was a collection of fluid in the left pleural cavity, and prescribing an ammonia and paregoric mixture, sent him in a cab to the Bushmen's Club. Next day found him there in bed, coughing a good deal, and as he was too ill to remain an inmate of that institution he was transferred to a private hospital. Admitted on July 9th, with a mid-day temperature of 99·2°, the physical thoracic signs were unchanged. A perineal urethral fistula, a relic of an old traumatic stricture, was discovered, attention being directed to it by the patient's urinous odour. The urine was acid, and free from albumin and sugar.

He was kept in bed on a light dietary, the cough mixture continued, and half an ounce of sulphate of magnesia exhibited. The temperature rose on the third evening to 100·4°, to fall below normal next morning, and vacillate thereafter during the next fortnight between 97° and 99·8°; the morning temperature being never over 99°, and more generally below normal. During this period there was more or less complaint of left thoracic pain, a continuance of cough, with scanty rusty sputum, first noted four days after admission; and now, about the upper border of the back dulness, scanty small moist sounds and an occasional rhonchus were heard. In addition to the pleuritic effusion there was evidently a limited pneumonia.

He slept fairly well, and the pain was apparently somewhat relieved by a belladonna plaster applied in the sub-axillary region. Repeated doses of laxatives and enemata were required to ensure the action of the bowels. During this first fortnight's treatment the very slight febrile condition, the fact that there was no increase of the area of dulness, and the possibility of the pleural fluid being serous, seemed to contra-indicate exploration; but as at the expiration of a fortnight the fluid had not decreased, the cough was still troublesome, and the temperature rose to 99·8°, after being normal or sub-normal for nine days, I aspirated and drew off four ounces of thick yellowish inodorous pus. Next day, under gas and ether anaesthesia by Dr. R. H. Marten, Dr. J. C. Verco being present, I resected a portion of the seventh or eighth ribs in the anterior axillary line, and

evacuated a quantity of pus, of which fourteen ounces was collected and measured.

The temperature fell, and eight days afterwards the patient was able to get up and sit in a chair for three hours, and on the twenty-first day he went to the Convalescent Hospital with a very small shallow sinus at the site of operation. The cough continued rather troublesome during the greater part of his residence in the hospital, but was restrained by morphia and ipecacuanha lozenges.

During a month's stay at St. Margaret's Convalescent Home he gained perceptibly in weight, and shortly afterwards went into the country looking for work.

The case is noteworthy as being an instance of chest injury without discoverable fracture, followed by pleurisy, pneumonia, and empyema.

There was, of course, a possibility of the chest effusion in the first instance being serous fluid, and that alone rendered early exploration inadvisable. The temperature, the absence of rigors or sweating, and the absence of distension of rib spaces, and of oedema or any urgent symptoms, indicated a serous rather than a purulent collection of fluid, and I am rather inclined to think that the effusion was at first serous; but a collection of fluid of some sort there certainly was when I first saw him six days after the injury. It is to be remembered that he had an old pus discharging sinus in perineo.

After opening the chest, to minimise the entry of air and to avoid soiling of the dressings and decomposition of the discharges into them, I adopted a plan I have used with advantage in suppurating hydatids. A medium-sized tube was inserted in the ordinary way, but secured to the skin edges by a couple of fine sutures, and left projecting six or eight inches from the wound, which was carefully sutured.

The projecting tube was passed into an oiled silk bag filled loosely with perchloride wool and iodoform. By this means the discharge was, to some extent, sterilised, and at any rate prevented from oozing widely. On the first day it was necessary to change the bag twice, and afterwards as a rule once a day, and I think the speedy closure of the cavity was facilitated by the method which, at any rate, saves wide soiling of dressings, and is very comfortable for the patient.

The tube and bag lie outside the antiseptic dressings applied to the closed incision, and one is able to roughly gauge the amount of discharge by inspecting the bag without removing the bandages or exposing the wound.

This method too decreases the amount of air which is usually sucked into the cavity.

I am indebted to my colleagues, Dr. J. C. Verco and Dr. R. H. Marten, for their kind assistance and advice in the treatment of this case. Dr. Verco was good enough to examine and report on the man's condition during his first few days in the hospital.

NOTES ON THREE CASES OF EPIDEMIC CEREBRO-SPINAL MENINGITIS.

By SINCLAIR GILLIES, M.A., M.D. (LOND.), D.P.H. (CAMB.), ASSISTANT PHYSICIAN PRINCE ALFRED HOSPITAL, SYDNEY.

EPIDEMIC cerebro-spinal meningitis is, I believe, sufficiently uncommon in Australia to warrant recording what appears to be three cases.

From time to time cases of cerebro-spinal fever have been brought before our scientific societies. The earliest record that I can find is by Dr. MacLaurin, in the *New South Wales Medical Gazette* for 1873. He describes three cases, two of which were fatal. In both the most prominent pathological feature was hydrocephalus, and the absence of pus in the meninges. The cases appear to have no connection with one another, and to resemble the chronic basal meningitis of Gee and Barlow.

In the same journal Dr. Milford records a doubtful case, as does Dr. J. P. Ryan in the *Australasian Medical Journal* for 1882.

Dr. Holden recorded a sporadic case with post-mortem in the *Australasian Medical Journal* for 1884, and in 1889 Dr. Finlay brought before the International Medical Congress of Australia a series of five cases occurring at Bathurst. This series is the most complete that has been recorded in Australia. Dr. Rennie read notes of two cases of acute cerebro-spinal meningitis before the New South Wales Branch of the British Medical Association in 1892, but did not consider them cases of epidemic cerebro-spinal meningitis. In July of last year Dr. Jefferis Turner, before the Queensland Medical Society, described an extremely interesting case, in which post-mortem Fränkel's diplococcus pneumonæ was found in the lungs, while the meninges contained diplococcus intracellularis meningitidis of Weichselbaum, a combination already noted by several European observers.

The present series was confined to the members of one household. Two of the cases came under my own notice; for the notes of the third, and for the suggestion to record the

series, I am indebted to Dr. Hankins, who very kindly placed his notes at my disposal.

The family in question consisted of nine members—husband, wife, female friend, and six children—four boys and two girls. Their circumstances were fair, but the children were neglected, though there is no question of starvation. The house stands high on Miller's Point, and the drainage appeared in good order, though the soil pipe ran under the house. The premises were badly kept, and the air-space per head inadequate. The children have always been healthy until attacked with measles, and had apparently recovered when this outbreak occurred.

I was called at 10 p.m. on 7th August to see James K., *æt.* 6, a well-nourished lad. There was a history of fits in infancy, and of measles six weeks before, from which he had completely recovered. No history of otorrhœa or earache. Six months ago he had fallen and struck forehead, and there was an indefinite history of a fall on the day before onset of illness. Was in excellent health on August 6th, but in the night became feverish and delirious.

On August 7th he vomited several times, and his bowels acted three times.

When seen at 10 o'clock at night the child was lying curled up on his left side, with his legs drawn up. He was irritable when disturbed, but when left alone was drowsy, yawning frequently. Scattered over the body and limbs was a petechial eruption, made out with difficulty by candlelight. His neck was rigid, but head was not retracted. His eyes were deviated to the left, and there was lateral nystagmus present. Pupils were equal, of moderate size, and reacted normally. Nothing abnormal was found in throat, ears, chest or abdomen. There was a scab present on the right knee.

Pulse, 160, small, regular; respiration, 64, yawning; temperature, 101.4°.

August 8th, at 11 a.m., child delirious, face turned to left, and some retraction present. Left wrist joint, right knee joint, and metatarsophalangeal joint of third finger of right hand noticed to be swollen and tender, but not red. The rash seen by daylight consisted of faint petechial spots. Was put on bromide and salicylate of soda. During the day was delirious, with conscious intervals. Vomiting, cerebral in character, was frequent. Bowels confined. Refused anything by mouth, so in the evening was given medicine by nasal tube.

Temperature: M., 100°; E., 99°. Pulse: M., 172; E., 100. Respiration: M., 52; E., 48.

No signs of paralysis were noticed.

On the 9th, at 9 a.m., the petechial eruption had almost faded, the wrist was less swollen, the knee remained as before. He now lay with legs straight, in state of low muttering delirium, passing his urine under him. The bowels had not acted, nor had he slept for two days. His back and neck were rigid, his pupils small, equal, and reacted normally. No view of the optic discs could be obtained. His face was occasionally flushed. No *tâche cerebrale* was obtained. Nothing abnormal was detected in the chest or abdomen. Pulse, 176; respiration, 48; temperature, 99.6°. Was taking nourishment much better.

In the evening the retraction of head was more marked, the joints less swollen. The abdomen, which had not at any time been retracted, was more full.

Pulse was 200, small, regular; Respiration, rapid, regular; Temperature, 99.6°. He had vomited three times during day, and had cried out at frequent intervals. Was given morphia gr. $\frac{1}{8}$. Later in the evening Dr. Storie Dixon saw him in consultation, and agreed that the diagnosis lay between epidemic cerebro-spinal and septic meningitis.

On the 10th, had passed a quiet night, and was almost comatose. Pupils were pinpoint (probably due to morphia).

The rigidity of neck and back was more marked.

Swelling of left knee and right wrist was still present, and there was a swelling about the size of a hazelnut on the back of the right wrist. The lower end of the left ulna was also surrounded by inflammatory thickening.

Abdomen was more distended, but no sign of fluid in it.

Temperature, 99.8°; Pulse, 212, small, regular; Respiration, 35, grunting. The patient emitted an offensive earthy smell.

He died at 7.30 a.m. on 11th, no sign of paralysis or convulsion having appeared. No *post-mortem* was allowed in this or the subsequent cases.

On the 10th the swelling on back of right wrist was aspirated, and found to contain thick curdy yellow pus. Microscopic examination of the pus showed many diplococci, staining well in methylene blue, and also by Gram's method.

CASE II.—Jack K., 3½ years, brother of deceased, had been "whiney" and out of sorts for three months. Had had measles at the same time as his brother, and had subsequently suffered from muco-purulent conjunctivitis.

During his brother's illness he was sent from home, but returned six days after his death.

On August 20th, three days after his return, he became feverish, restless, and vomited. His breathing was noticed to be heavy and wheezy, and he complained much of thirst. Was given castor oil, and next day his bowels acted six times. Fever continued.

I saw him on the afternoon of the 22nd, i.e., on the third day of his illness.

He then looked very ill, and lay tossing about restlessly, "making faces" (as his mother put it), as though in pain. The pain seemed referred to the abdomen, which was tender and distended. Scattered over the body and limbs were some petechiæ.

His tongue was dry and brown, his breath sickly-sweet. In the chest a few scattered moist râles were heard, but no signs of consolidation made out.

Temperature in groin was normal. Pulse, 156, small, regular. Respiration rapid, but regular. Urine, 1012 acid, cloud of albumen, no sugar.

At 11.45 p.m. his condition had apparently improved slightly, his tongue being moist, and pulse and respiration less rapid. There was no sign of rigidity, squint, or paralysis. His abdomen was still distended and tender, his extremities cold and cyanosed.

On 23rd, owing to family disagreement, he was taken to North Shore, where he died on 24th.

Dr Rorke, who saw him there, tells me that on the 23rd marked retraction and rigidity of the neck and back set in, and that the case assumed the condition of typical cerebro-spinal meningitis.

CASE III.—Patrick Chas. K., *æt.* 10. Up to present illness a healthy, bright boy. Had convulsions in infancy; no history of other illness.

Commencement of present illness August 24th, 1898, day of brother's death. Soon became delirious, with vomiting and shivering. Complained of pain in nose and back of neck. No drawing back of neck was noticed. First seen by me on August 25th. Drowsy and lethargic, with intervals of active delirium, attended with loud cries, but not the characteristic "hydrocephalic cry." Pupils normal, no convulsions, no paralysis; some hyperæsthesia of lower part of body. Ears and throat normal; no rash; pulse, 85; no albumin in urine; constipated. Given $\frac{1}{2}$ gr. calomel every hour.

August 27th (morning).—Temperature, 104.2°; pulse, 100. No sleep, constantly crying out; pulse very weak. Nourishment had not been properly maintained, so special nurse was engaged. Morphia, $\frac{1}{8}$ gr. hypodermic injection.

August 28th.—Much better. Temperature, 99°, and pulse stronger and slower. Intelligence returning; takes food well.

August 29th.—Much quieter night; is quite rational, and fairly quiet. Some squint noticed.

August 30th (evening).—Has been very noisy all day; constantly crying out, and has become very husky and almost voiceless. Squint increased. Throat examined, and found hyperæmic with flocculent white patches over it, most likely either thrush or milk curd. A swabbing was taken for cultivation. Patient died suddenly two hours after being seen by me (10 p.m.) without coma or convulsion. "Seemed to choke."

Dr. Isbister kindly examined the swabbing, and found no diphtheria, but the cultivation consisted principally of diplococci, with torulæ. The special form of diplococcus was not made out.

During the illness of the first child the baby, *æt.* 18 months, was convulsed and afterwards feverish for two days, the symptoms apparently arising from gastric disturbance.

Shortly after the first child died, the eldest daughter, K., *æt.* 12, was ill for two days, complaining of fever and severe pain in head and back of neck.

After the death of the third child Mrs. C., who lived in the house, was ill for five days with pain in the head and back of neck, retching and sore throat. She says that a measly rash appeared and disappeared during her illness.

These cases are possibly mild attacks of the same disease that proved fatal to the other children, but their nature must remain indefinite, not having been seen by a doctor.

Dr. Hankins tells me that the aunt who nursed the boy P. was subsequently attacked by what appeared to be severe influenza.

Omitting these doubtful cases, it seems clear that we are dealing with a localized outbreak of epidemic cerebro-spinal meningitis.

The three cases occurred in quick succession in the same family. All were rapidly fatal, the duration of illness being, respectively, five and seven days. Vomiting occurred at the onset in all.

In two a hæmorrhagic eruption was present; in one joint swelling occurred.

In the first case meningeal symptoms appeared early; in the second not till the day before death; in the third, squint appeared the day before death, but no rigidity was present.

The pulse and respiration remained regular throughout in all cases.

Several points of interest are suggested by the above series.

Firstly, as to diagnosis: The first case gave the key to the situation. In it the march of symptoms was typical—sudden onset, pain and rigidity of neck, hæmorrhagic eruption, and later joint swellings. Had the case been seen only after the occurrence of joint swelling, diagnosis from general pyæmia, or acute suppurative arthritis with meningitis, would have been difficult. Without the joint signs and hæmorrhages the diagnosis from tubercular meningitis would be hard, though the onset was sudden and the course rapid for tubercular meningitis. The pulse and respiration were also regular throughout. The two latter cases at first might have been taken for severe influenza, acute peritonitis, or acute septic intoxication. Influenza would have covered the milder doubtful cases. Diagnosis between mild epidemic cerebro-spinal meningitis and influenza must often be impossible.

Among diagnostic features the presence of leucocytosis is noted as of value. Unfortunately, leucocytosis occurs also in septicæmia, pyæmia, pneumonia, and some cases of tubercular meningitis. Clinically, in distinguishing from other forms of meningitis we have to rely on the acute onset, the presence of herpes, hæmorrhages, joint swelling, regular pulse and respiration, and occurrence in epidemic form. Lumbar puncture, with bacteriological examination of the withdrawn fluid, is, where possible, a most important aid in diagnosis, and one used to a considerable extent in Europe.

Bacteriological examination of the nasal and faucial secretion is said to show the presence of diplococcus meningitidis intracellularis in many cases. It is worthy of note that Dr. Isbister's examination showed many diplococci. In several recorded cases the presence of diplococci in the blood has been observed.

Another question of interest is that of the cause of the outbreak. Were the cases due to direct infection, or to a common factor in the environment? Unfortunately, this cannot be definitely settled. The sequence of the cases suggests infection passing from one to the other, and this would be favoured by the overcrowding which existed.

The presence of Fränkel's diplococcus pneumoniæ in the pus obtained from the wrist of the first case tempts one to assign it as the cause of the outbreak; but that it is unsafe to argue the presence of the same organisms in the meninges from examination of joints or lungs is shown by Dr. Turner's case quoted above, and by the case recorded by Furbringer, where

fatal meningitis occurring in a severe case of gonorrhœa was at first thought to be due to the gonococcus, but subsequently was shown to be caused by diplococcus meningitidis intracellularis.

Unfortunately, no post-mortem could be obtained in the present series, so the cases remain incomplete.

Various organisms have been credited with being the cause of epidemic cerebro-spinal meningitis.

Of these, Fränkel's diplococcus pneumoniæ was at one time considered the specific organism, and in some cases it undoubtedly is the cause, reaching the meninges either through general blood infection in cases of pneumonia, or by direct spread from the middle ear or nares. Many such cases are on record.

In 1887 Weichselbaum described in cases of epidemic cerebro-spinal meningitis a diplococcus morphologically closely resembling Fränkel's diplococcus, but differing in some of its cultural features, and the fact that it does not stain by Gram's method. This observation has been fully confirmed, and Weichselbaum's diplococcus has come to be considered the most common factor in the causation of epidemic cerebro-spinal meningitis.

Righi, who has reported many cases of cerebro-spinal meningitis, considers the diplococcus meningitidis intracellularis the cause of ordinary mild outbreaks, while the more virulent and fatal cases he attributes to diplococcus pneumoniæ.

Still, before the Pathological Society of London, in October, 1897, described as the cause of simple posterior basic meningitis in infants and children a diplococcus almost identical with Weichselbaum's diplococcus intracellularis meningitidis. No suppuration occurred in his cases, but there was a tendency to peri-articular swellings.

The bacillus of influenza is credited with being sometimes the cause of epidemic cerebro-spinal meningitis, and in the *British Medical Journal* for 1895 five cases of meningitis occurring after supposed influenza are recorded. In none of these cases was bacteriological examination of the meningeal exudate made, and I have failed to find in the small amount of literature at my command any record of the finding of influenza bacilli in the meninges, though Mallory and Wright mention its occurrence in that situation in their text-book on pathological technique. Distinction between epidemic cerebro-spinal meningitis and influenza can often be made only by bacteriological examination.

Little can be said about treatment beyond keeping the patient quiet, supporting his strength, and treating symptoms. Cold or heat to the head and spine, quinine, calomel, potassium iodide, all have their advocates. For pain and sleeplessness morphia is invaluable.

Righi relates a case recovering after the injection of serum from a patient who had passed through an attack.

Possibility of advance appears to lie in diagnosis by lumbar puncture and the production of an anti-toxic serum.

IODOFORM ECZEMA: A FAMILY IDIOSYNCRASY.

By A. W. ESLEB, M.D., HEATHCOTE, VICTORIA

On 3rd August, 1897, Mr. J. J., aged 32 years, received a deep axe wound on the inner side of his right ankle. There was very severe hæmorrhage, and as the patient had to travel by buggy about seven miles to my house, he lost a lot of blood.

Having applied an Esmarch's tourniquet, I cleansed the wound, using every antiseptic precaution, and drew the edges together by four deeply passed silkworm-gut sutures, and applied double cyanide gauze dressings, wadding, and a bandage.

On 7th August the wound was healed and healthy. I removed the sutures, and dusted the skin with powdered iodoform and applied a dry pad of lint and a bandage.

On 8th August some serious discharge came through the dressings. I opened the dressing; there was some eczema around the wound. I again dressed with iodoform.

August 9th.—Much more eczema, with very copious weeping; the skin was affected up to the knee; there was a good crop of vesicles and pustules. The edges of the wound gaped slightly, as the union between the edges seemed to have yielded owing to the tension of the skin.

Patient told me for the first time that he suspected the iodoform was causing the trouble, as it affected him similarly before. He said that eight years ago he had a wound on one of his knees. The doctor then attending him used iodoform as a dressing, which produced eczema which extended almost to the groin. The attack lasted a month. Twelve months ago he crushed his finger. He bought some iodoform at a chemist's and applied it to the injured part. Eczema followed, and he required medical attendance. He also had a crushed ankle six years ago; one dressing of iodoform was applied, which caused a large bleb, and his doctor stopped the dressing.

Patient's father and one sister are also susceptible to iodoform. Once the father several years ago had iodoform applied for some reason. The application was followed by a crop of "blisters." The sister cut her hand and injured a bloodvessel; iodoform was the dressing used. The palm of her hand got "blistered," but the arm remained free.

I discontinued the iodoform at once, and treated the eczema by soothing applications. He got well in about a fortnight.

On 9th August patient had eczema on left ankle and instep, caused by rubbing his left foot against the other to relieve itching. He also had a patch of eczema with free weeping on one hand, where some iodoform had lodged.

I asked him why he allowed me to apply iodoform, knowing how it had affected him before. He said: "You are a doctor, and I thought you knew best."

He will not be so trusting in the future.

NOTES ON TWO CASES OF EXTREME PROLAPSUS OF THE RECTUM.

By THOMAS FIASCHI, M.D., CH.D., PISA AND FLORENCE, HONORARY SURGEON, SYDNEY HOSPITAL, SYDNEY.

READ AT MEETING OF MEDICAL SECTION, ROYAL SOCIETY, N.S.W., 21ST OCTOBER, 1898.

H. J., age 35, painter and musician, was admitted to the Sydney Hospital on the 19th January, 1895. A man of medium size, lightly built, and of a somewhat effeminate type. He had always suffered from protrusion of the bowel through the anus. This had been gradually getting worse, so that now the slightest effort would cause the bowel to prolapse. It was impossible for him to prevent his faeces from constantly escaping, unless by means of astringent medicines he kept his bowels in a state of extreme constipation.

This condition not only caused him great discomfort, but interfered with his business so much, that he requested surgical assistance at any risk. He stated that seven years before he had been under treatment in the Adelaide Hospital, but could not tell us what sort of operation had been performed on him.

On examination I found his anus extremely patulous. When lying on his side perfectly quiet an opening of three quarters of an inch in diameter was present in the centre of the anus, through which the rectal mucosa could be easily seen. With very slight straining he could push out a column of rectum measuring a height

of $3\frac{1}{4}$ inches, and a circumference at the base near the anus of $8\frac{1}{2}$ inches. The mucous membrane presented the thickened and dry character of cutization with enlarged and tortuous hæmorrhoidal vessels.

Owing to the size of the prolapsus, I did not try on him the multiple longitudinal cauterization, according to Van Buren's method—an operation which, in other cases of more moderate prolapsus, I have found to give excellent results—and I gave the preference to the more radical measure of amputation of the protruding mass.

On the 21st January, 1895, under ether, and having the patient in the lithotomy position, I first pushed a sound into the bladder to ascertain the exact relation between it and the protruding rectum, and found that it was not dragged down with it. Then drawing down the prolapsus to its full extent, I passed my finger in the central opening of it and found that it involved the whole thickness of the walls of the rectum, a true *proci dentia recti*. I then made steady and tense the prolapsus by seizing each side of its free end with two pressure forceps, and divided the outer layer of the bowel with a scalpel in its anterior half, on the line of junction of the skin with the mucous membrane. Free hæmorrhage followed, soon stopped by pressure forceps. I cut open the recto-vesical fold of the peritoneum which came directly under the line of incision, and having sutured the two edges of it with a continuous top-sewing stitch suture of fine catgut, I cut through the inner layer of invaginated rectum. Some further hæmorrhage from superior hæmorrhoidal veins took place. These were seized, and all blood-vessels previously secured having been tied, I sutured with interrupted silk the edges of divided rectum to anal margin, paying attention, whilst doing so, to include in the stitching the mucous membrane and muscular layer of the bowels, and as much of the deep tissue under the margin of the anus as possible. This done, the posterior segment of the prolapsed cylinder of the rectum was rapidly divided, cutting from the outside inwards. In dividing this, we found a considerable portion of the *levator ani* muscle caught between the two layers of prolapsus, and could not avoid cutting it. Having ligatured all bleeding vessels, we sutured the posterior half of the rectum to the anal margin in the same way as we had done for the anterior.

Patient, though collapsed at the end of the operation, made a good recovery. Great attention was paid to changing dressings as soon as they became stained with fæces, and the line of

sutures was washed daily with 1 in 40 carbolic lotion. Between the ninth and tenth day after the operation the whole of the sutures were removed. For the first ten days the temperature ranged between 98° and $100^{\circ}.6$.

The immediate result was the complete disappearance of the prolapsus of the anus. The patient was sent to a convalescent home to recruit his strength. On the following May I performed a second operation on him for the purpose of contracting the anal orifice. I excised a wedge-shaped portion of skin and sphincters, having the apex on the coccyx and the base near the anus. The two sides were approximated and united with deep sutures, very much as is done in Roberts' cuneiform proctoplasty*, and the patient was discharged having perfect control on his anus.

I saw the patient again 18 months later, when he complained of relaxation of the bowels coming on, chiefly in the morning. We kept him under observation for a fortnight, and found that, under the influence of milk diet and rest, this relaxation completely disappeared.

We found then that the condition of the rectum was good, and that no return of the *proci dentia* had occurred. The anus was still unduly patulous, but not as bad as before. We thought at the time that this slight amount of patulousness, by admitting atmospheric air into the intestine, might have a share in producing the intestinal catarrh of which he had recently complained. My excuse for detailing to you these technical points is that my second case, though operated in the very same way, and receiving the same after-treatment, had a very different result.

This case was a young man, T. C., 24 years old, of somewhat delicate appearance, who, as long as he remembered, had been suffering with *proci dentia recti*, which during the last 18 months had afflicted him much, both physically and mentally. With him also there was involuntary escape of fæces, owing to patulousness of the anus and protrusion of the rectum on the slightest movement or strain. The prolapsed mass measured $3\frac{1}{2}$ inches in length and 9 inches in circumference. All the other vital organs seemed healthy and sound.

On the 24th July, 1895, assisted by Drs J. A. Dick and C. Corlette, I operated on him in Miss Herbert's private home in exactly the same way as described in the first case. With him also the vesico-rectal fold of the peritoneum coming under the line of incision was divided and carefully sutured with fine catgut, and the

* Dennis, "System of Surgery," vol. iv., page 535.

divided rectum sutured carefully to the margin of the anus by means of silk sutures. And with him also strict attention was paid to anti-sepsis, both during the operative act and in the after-treatment. Less collapse followed the operation, and the patient appeared to do splendidly for the first five days, having only a temperature ranging between 99° and 100°·4. On the morning of the 30th July, the sixth day after the operation, castor-oil was given to him, and the bowels were well relieved. I saw him in the afternoon and found him free from pain and distension, looking well both generally and locally.

The same evening at 9.30 I was urgently summoned to him, and on arriving at the house, found him collapsed, and within one minute of my entrance into the room, he died.

The account given by Nurse Herbert was that up to 9.10 p.m. he had been quite well, reading and talking cheerfully. At that time he turned on his left side to play with a kitten that had entered the room. All at once he complained of great pain in the left iliac region, which rapidly increased, ascending to the chest. This was accompanied by great jactitation and dyspnoea. Drs. MacCormick and Gore-Gillon, who were at the time in the house, immediately lent their assistance to the patient, thinking that some internal perforation had taken place, but to no avail, as fatal collapse rapidly set in, and within twenty minutes from the onset the unfortunate lad gasped his last breath.

What was the cause of this sudden and unforeseen catastrophe? I regret that I am not able to give definite information on that point, as it was impossible for me to obtain from the friends consent for an autopsy. The only thing that I was able to make sure, by rectal examination, was that the line of sutures at the anal orifice was intact, and that good union was in course of progress, so that no perforation from the rectum into the peritoneal cavity was possible. In my opinion only one of the two following things could have happened:—

First: An abscess between the anterior wall of the rectum and the peritoneum, which suddenly burst through the sutured portion of the peritoneum into the peritoneal cavity with fatal collapse.

Second: Septic thrombosis starting in either the inferior or middle hæmorrhoidal veins ascending to the internal iliac vein, with detachment of a large thrombus, and embolism either of one of the cardiac orifices or more likely of the pulmonary artery.

Against the first view, I think it extremely unlikely that any collection of pus could have

formed between the wall of the rectum and the peritoneum without having more temperature and pain. Furthermore, death from sudden rupture of an abscess in the peritoneum, has never in my experience been so rapidly fatal as in this case, nor has it been accompanied by the peculiar breathlessness and cyanosis that we had here.

The second view seems to me the most likely, and is corroborated by the fact that septic thrombosis not unfrequently takes place without a high temperature. Whilst writing this paper I have under my care in the Sydney Hospital a woman who, seven days after removal of the vermiform appendix, was seized with hæmorrhagic infarction of right lung, and afterwards developed in succession thrombosis of the left femoral veins, then of the right femoral veins, and ultimately of the left brachial veins, from which she is now recovering. Though these attacks have been most typical of thrombosis, the temperature has never been higher than 100°. Furthermore, such fatal cases have been frequently recorded. The last one I came across is one in *La Semaine Médicale*, a case of Nauwerck, in which a woman, 64 years, suffering from varicose veins, had both her internal saphenæ ligatured according to Trendelenburg's method. On the tenth day after operation she died suddenly. An autopsy revealed the presence of thrombosis of the proximal end of one of the ligatured veins, and of bi-lateral pulmonary embolism.*

If this can happen in the ligature of the veins which run in regions where asepsis can be easily carried out, we must *à fortiori* expect it in the ligature of veins like the inferior and middle hæmorrhoidal, running in a region where perfect asepsis is well-nigh impossible.

Remarks.—It is always disappointing for a surgeon if a case after operation dies, but infinitely so when the operation was not undertaken as a last resource in a hopeless disease, but was performed as a measure of relief in an infirmity which in itself did not threaten life. When such a misfortune occurs, and the surgeon has not himself to blame for carelessness or mishap, it is important to inquire strictly into the method of operation adopted.

The operation of amputation or excision of the rectum for extreme cases of prolapsus is recommended in the greater number of manuals of surgery published within the last five years, and was first introduced into practice by Aufret in 1882.† Successful cases

* *La Semaine Médicale*, 24th August, 1898; page 360.

† "Progress Medical," 1882: No. 84.

have been reported by Billoth, Nicoladoni, Bogdanik, Nelaton, Perier, Kröulein, Hoffa*, Trevest, Partridge, Raye and others.

Of fatal cases, I have only been able to find one record, that of a child 5 years old, who died of septic peritonitis five days after operation. The case was operated by Brogdanik† of Vienna, who declared that in the future he intended to perform colopexy instead of resection. However, I find that records of cases operated by amputation within the last three or four years are becoming very scarce, and, on the other hand, records of colopexy are becoming numerous. This seems to me a strong indication that, though not recorded, there have been bad cases, and that surgeons are looking round for a safer method. Joseph D. Bryant, of New York, gives a series of twenty-nine cases of colopexy with no deaths‡

This operation is done in two ways. The abdomen is opened in the iliac region, above Poupart's ligament, and some operators, after drawing the lower intestine to the wound, so as to completely reduce the prolapsus, suture the sigmoid flexure to the anterior abdominal wall. Others, instead, transfix the meso-rectum or meso-sigmoid with two or three deep sutures, which are then passed through the aponeurosis, muscle and peritoneum.

This series of cases of Bryant, though free from deaths, shows that one third of the cases had recurrence of the prolapsus. As regards ultimate results, colopexy is not as successful as amputation of the rectum, but better ultimate results may be expected in time with improvement of the technique.

Rectopexy is another new operation introduced recently by Tricomi and Verneuil for the radical cure of procidentia recti.¶ An incision is made from the anal margin to the coccyx, through which the posterior wall of the rectum is isolated, then two or three silk sutures are passed through the muscular and sub-mucous layers of the rectum, and these suspend and attach it to the tissues immediately in front of the sacrum and coccyx. If necessary purse-string sutures are used to diminish the lumen of the anal portion of the rectum and of the anus itself, so as just to allow the introduction of the index finger.

I regret that I cannot find for you a series of cases of this new operation, which, however, a

priori does not seem to me likely to be of much permanent benefit in the severer forms of prolapsus.

For my part, after the experience of my second case, I have come to the conclusion that amputation with circular suture in severe cases of procidentia recti is not a safe operation, and in future will not perform it again unless I have first tried what results I can obtain by colopexy.

PERFORATING GASTRIC ULCER.— OPERATION — PNEUMONIA — RECOVERY.

By R. STEER BOWKER, M.R.C.S.E., Hon. Surgeon, SYDNEY HOSPITAL, SYDNEY.

SARAH H., *æt.* 38, widow.

Friend's Statement.—Patient admitted complaining of pain in the stomach. A week before admission to the hospital patient was doing some housework, when suddenly she vomited about two pints of bright blood; had never vomited before then, but had had slight pains in the stomach for some time; was seen by a medical man, who ordered rest in bed; at the end of a week was up and walking in the street, when she was suddenly seized with very severe pain in the stomach and vomiting (not blood). This pain continued till she came to the hospital the same night.

13th July, 1898.—*On examination:* Patient very blanched in appearance and entirely collapsed. Pulse 132, very feeble and "running" in character. Half an hour after admission patient vomited some greenish material, which, however, contained no blood. The abdomen on first examination was somewhat distended; the pain on pressure was not in any particular part, but diffuse in character. The abdomen was resonant, except in the right iliac fossa, where there was a circumscribed area of dulness. A quarter of an hour afterwards, on further examining, the whole abdomen was dull to percussion, except a small area near the liver which was resonant; the pulse also seemed weaker in force.

The Medical Superintendent (Dr. McClelland) and the Senior Resident Medical Officer (Dr. Harris) saw the case and agreed that the case was probably one of perforated stomach, and at once telephoned for me and my medical colleague (Dr. Jamieson), and, after a consultation, we decided to operate, as giving her an only chance, though she was in such a desperate condition that it was doubtful whether she would

* "Annals of Surgery," January to June, 1895; page 191.

† *Lancet*, 22nd February, 1890; page 396.

‡ "Annals of Surgery," January to June, 1895; page 122.

§ "Annals of Surgery," August, 1897; page 166.

¶ Prof. F. Duranté, "Patologia e Terapia Chirurgica," Roma, 1898; vol. III, page 488.

stand] any prolonged operation. This being explained to her friends, she was taken to the operating theatre, strychnine injected and saline solution instilled beneath each breast (about 30 ounces).

Operation.—13th July, 11.30 p.m. Ether was administered by Dr. L. Harris, and Dr. Throsby assisted me. I made an incision about $3\frac{1}{2}$ inches long in the linea alba, above the umbilicus, and opened the peritoneal cavity (encountering a lipomatous condition of the sub-peritoneal tissues which was rather troublesome); a considerable quantity of pale cloudy fluid spurted out (looking like water with finely divided bread-crumbs mixed with it). The stomach was found and drawn up to the wound, and its anterior surface thoroughly searched without finding an opening. The two layers of the gastro-colic omentum were next divided in part, and the posterior surface of the stomach explored with the finger, but nothing felt, but some lymph seen and also more of the cloudy fluid before spoken of. The opening in the omentum was considerably enlarged, and the posterior surface of the organ brought thoroughly into view by turning it up towards the liver, and, after a little trouble, the opening discovered, with some food looking like bread-crumbs protruding from it. This being wiped away the edges were seen to be circular clean-cut and well-defined and about one line in diameter and situated near the pyloric end of the lesser curvature. The stomach wall was folded over the ulcer by means of a running Lembert suture, and then stitched over again, taking in about a quarter of an inch on each side and extending for about $1\frac{1}{2}$ inches. Some large veins in the stomach wall caused a good deal of trouble, and were caught up and ligatured. The whole abdominal cavity was then thoroughly irrigated with hot saline solution until it came away quite clear. The stomach was carefully replaced, a counter opening made in the right kidney region, and a large tube inserted, and having ligatured the sub-peritoneal lipoma, the abdominal wound was sutured, closed and dressed in the usual manner.

The patient's condition after the operation was but little worse than before. Pulse 140, a little weaker. An enema of hot coffee and brandy was given, and strychnine (gr. $\frac{1}{10}$) ordered every 2 hours, brandy enemata every 4 hours, and sip of hot water by the mouth if very thirsty.

15th July.—Pulse 136, slightly better tension; temperature 100° ; very thirsty; tongue clean, but dry; did not sleep; some spasmodic pain; to have calomel (gr. v.) and enema of mag. sulph. in the morning.

16th July.—Lumbar drain removed and wound stitched (by loose stitch left for the purpose). Pulse 120, better; temperature, 100° ; bowels open well; some slight abdominal pain.

17th July.—Slept very little; no vomiting; slight spasmodic pain; temperature 101° ; pulse 120, better tension; thirsty; bowels open twice.

18th July.—Had a little sleep after morphia; had liq. peptonoids in soda-water during night. Pulse 112; no vomiting; no pain; no tenderness on pressure in belly; slight cough; temperature ran up to 102° during night.

21st July.—Slight cough; temperature 101.5° ; no pain.

22nd July.—Cough troublesome, and some discomfort in chest; pulse not so good; temperature 103° .

23rd July.—Temperature 104.8° (phenacetin). Cough bad; pain in back on coughing. Chest—no dulness in front, breathing rather suppressed and quiet; at base of right lung in front occasional râles heard. Behind—both bases dull to percussion; breath sounds very weak; bronchophony on both sides, and marked tubular breathing, especially at right base; also "fine hair" crepitation; no friction heard; sputum rusty.

R mist. scillæ a. strychnine a. digitalis. Brandy, by the mouth; Benger's food, bovril, milk.

24th July.—Stitches removed; strapping placed round abdomen; looks all healed. Patient transferred to physician. She ran through an attack of double pneumonia, and a stitch abscess formed at site of abdominal wound. When delirious on the 25th July she got up when not watched (she was in the general ward) and walked in the ward.

She had chicken on the 7th August, and normal diet on the 2nd September.

5th September.—Went out quite well.

I have to thank my House Surgeon (Dr. Throsby) for the notes of the case.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 25th November, at 8.15 p.m.

Business :—General.

G. T. HANKINS, Hon. Secretary.

A SUCCESSFUL MAJOR OPERATION IN A GALE OF WIND.

HERNIOTOMY PLUS LAPAROTOMY.

By E. MATTHEWS OWENS, M.D., L.R.C.P.,
M.R.C.S., MELBOURNE.

It is to be sincerely hoped that it will but seldom occur that a surgeon is placed in the same position that I was on the 8th September last, when on board the Aberdeen White Star S.S. "Nineveh," off the Cape.

B. V., *æt.* 38, a steerage passenger, when lifting a box in a strong gale, strangulated an old inguinal and scrotal hernia. Strangulation took place at 4 p.m. I tried gentle taxis, ice, opium and other usual remedies, but all to no purpose. I felt assured that an operation would most likely be necessary, therefore, was very careful about taxis, not using more pressure than was absolutely necessary. At 8 p.m. I decided to operate, knowing full well that every hour would lessen the chance of success, and the man was rapidly losing strength, vomiting being incessant and pain excruciating.

Anæsthetist.—The purser (Mr. Freman), to my enquiries, said he had seen chloroform given once and was not afraid. So I replied: "You will do."

Instruments.—There was the usual board-ship amputating-case (no good in this operation) and a pocket dressing-case. The latter had to supply all the instruments, in which there luckily was a finger-knife, otherwise a pen-knife would have had to serve; and in the amputation-case was one pair of Kæberle's forceps—pattern, first ever made, I should think.

Silk.—Only braided, the usual kind, on a card. None too clean.

Needles.—Raked up six, same that are in a pocket-case, used for sewing up superficial cuts. They averaged each about one inch long.

Sponges.—None; but about $\frac{1}{2}$ lb. of alem-broth wool; plenty of lint, and, fortunately, a bottle of iodoform gauze.

Antiseptics.—Had to depend upon a bottle of liq. hydrarg. perch. and boracic acid, latter not too plentiful.

Couch.—Empty beer-cases and a mattress.

Operating Theatre.—The surgery space available, 8ft. x 5ft. 6in. I thought of St. Mary's Hospital theatre, where I had spent so many happy and profitable hours during the past 12 months, watching my old friends, Owen, Page and Pepper, doing such brilliant work; and I laughed, to think if they could only see my theatre, instruments and assistants. For the latter I had to have two deck-hands, whose

sole duty was to keep the patient from rolling off his by no means safe couch, and in spite of every care, we were hurled from side to side by the rolling, and more than once, assistants, patient, anæsthetist and operator were generally mixed up when an extra big sea hit the ship.

The Operation.—The patient having been got under the influence of the chloroform, I again tried taxis, with no benefit. After disinfecting skin as well as I could, and shaving the pubes, I cut down over the sac, which I rapidly opened, and divided the stricture. (In the pocket-case there was a hernia knife). A "mixing up" I have referred to above just then took place, and when we had all got back to our places I found that the intestine had come out of the scrotum to the extent of about 12 to 15 inches (it was a very big hernia). Then a mere matter of detail happened, *viz.*, the patient requiring artificial respiration to be performed (the anæsthetist had been too liberal with the chloroform). That being successful, I was again at liberty to resume my operation. Having no sponges or assistants to look after the exposed bowel, it had to take its chance whilst I was at the other duty. That chance was not very bright, I thought, for the bowel was none too warm. I now tried to return the gut into the abdominal cavity, and, do what I would, I could not coax it back. There were no adhesions at the stricture; the cause of my not being able to get it back was the presence of so much flatus. I was at my wits' end. Only think, my readers, not a soul to consult, no friendly colleague to offer a suggestion. I decided to perform laparotomy and draw the bowel from the inside. I made my incision about 4 inches long in the middle line. There was a large amount of venous bleeding from the engorged abdominal vessels, which I could only control by hot water. This stopped, I opened the peritoneum and passed my hand within the abdomen, and, by gentle manipulation from without and within, was able to pass the flatus on and get the bowel back into the abdominal cavity.

The sewing-up of the abdominal wound presented some difficulty, the needles being so short and abdominal walls thick; no needle-holder, but the handle of the finger-knife, the blade being shut, pushed the needle on, and the dissecting forceps did the rest.

I thought that, if the poor fellow did live, I should like that his hernia should be radically cured; but how was I to get the pillars of the ring together, for I most certainly did not care to bury sutures with such silk as I was using, so I thought of gathering the edges of the pillars of the ring like a purse, using two of my little

needles on one piece of silk. After gathering it thus up I brought both needles out through the skin half-an-inch apart, and an inch or so from the wound, and tying tightly. The result was most gratifying, for the parts became thoroughly consolidated.

After Treatment.—That consisted chiefly of the patient being rolled from side to side by the motion of the vessel incessantly for four days, for it blew hard all that time, but in spite of everything against him, his temperature never reached 99, and he walked off the steamer in Melbourne on 28th September, and I heard from him from Tasmania on 24th October "that he never was in better health, that the wounds were only faint red lines, and that he felt nothing whatever of his rupture."

Remarks.—Now, it is no use publishing cases without there is some lesson to be learnt, and what does this case teach? First, to remember that in the majority of cases of strangulated hernia, that taxis will not be successful; therefore use it as little and as gently as possible, for if you do not operate yourself, someone else will, and that someone else will not bless you for making the patient run greater risk from the useless manipulation the bowel has received at your hands. Secondly: Operate early. This man owed his life to the fact that I used but gentle taxis, and that I operated quickly, not allowing him to get exhausted by vomiting and pain when knowing full well I should have to try and relieve him sooner or later by operative measures. Thirdly: Never despair or funk an operation, however black things look against you.

We wish especially to direct attention to the Medical Hand Atlases published by Mr. Saunders. The following Atlases are now ready:—"Internal Medicine and Clinical Diagnosis," "Legal Medicine," "Diseases of the Larynx," "Operative Surgery," "Syphilis and Venereal Diseases." Those in preparation are:—"Atlas of External Diseases of the Eye," by Dr. O. Haab, of Zurich (100 coloured illustrations); "Atlas of Skin Diseases," by Professor Dr. Franz Mracek, of Vienna (with 80 coloured plates from original water-colours); "Atlas of Pathological Histology," "Atlas of Orthopedic Surgery," "Atlas of General Surgery," "Atlas of Operative Gynecology," "Atlas of Psychiatry," "Atlas of Diseases of the Ear." In planning this series of Atlases, arrangements were made with representative publishers in the chief medical centres of the world for the publication of translations into nine different languages, the lithographic plates for all these editions being made in Germany, where work of this kind has been brought to the greatest perfection. In this way the enormous expense of producing the plates was shared by the various publishers, so that the cost to each one was reduced to practically one-ninth. Thus it has been possible to secure for these Atlases the best artistic and professional talent, to produce them in the most elegant style, and yet to offer them at a price heretofore unapproached in cheapness.

A MEETING OF THE MEDICAL PROFESSION.

MIDWIFERY NURSES' BILL.

A GENERAL meeting of the medical profession was held at the Royal Society's room on Tuesday evening, 25th October, to consider the Midwifery Nurses' Bill, which was before Parliament. Dr. W. Chisholm was voted to the chair. There were also present:—Drs. Crago, Maitland, Thring, Todd, Mills, Worrall, Clarence Read, Coutie, Chas. MacLaurin, Borke, Magnus, O'Hara, Chenhall, Jas. Graham, McClelland, Watson Munro, Barkas, Piercy, Parker, Arthur, Gordon MacLeod, Gledden, Milford, Doak, G. P. Hall, Clabbe, Allan, West, Clark, Jamieson, O'Neill, Goode, J. A. Dick, Foreman, Kendall, Wilkinson, Fairfax Ross, Neill, Binney, Walker-Smith, Carruthers, Abbott, Collins, Schrader, Matheson, Macdonald Gill, G. Marshall, Sawkins, Marano, H. H. Marshall, W. K. Warren, Jenkins, Wood, R. T. Jones, Lovegrove, Gillies, Dixon, and others—65 in all. Dr. Hodgson wrote regretting his enforced absence from the meeting.

The CHAIRMAN called upon Mr. Hankins to move the resolution.

Mr. HANKINS said: Mr. Chairman and Gentlemen,—You must not conclude that because I have undertaken to move the resolution on the business paper that I feel I have any special qualification for the task, or intend to ventilate any particular views of my own on the subject. As secretary to the branch, I have been asked by the Council to open the proceedings, and in moving the resolution I will endeavour to recall to your minds the principal arguments which have been used against the Bill. The Midwifery Nurses' Bill introduced by Dr. James Graham, M.L.A., has now been passed by the Lower House, and is ready for presentation to the Legislative Council. On the representation of the New South Wales Branch of the British Medical Association, Dr. Graham has courteously delayed the presentation of the Bill in the Council until the medical profession have had another opportunity of expressing its opinion on it, and as he allowed it to be understood that the vote taken to-night might have the effect of deciding him either to proceed with the Bill or allow it to lapse, it is well that we should record our vote with the arguments for and against fresh in our memories. Dr. Graham will, no doubt, supply the former, whilst my duty will be to draw your attention to the latter. It happens that, during the last twelve months, a very similar Bill has been introduced in the Imperial Parliament, under the auspices of Mr. J. B. Balfour, and, owing to a lucky ballot, stood a very good chance of coming on for a second reading in the course of the session. This Bill was so strongly opposed by the medical profession, backed up as it was by the General Council for Medical Education, that it never got beyond the first reading. About the last notice referring to it was as follows:—"The Midwives' Registration Bill flickered up with momentary importance last Friday. It is put down for June 8th, but it will have no chance on that day, so the Midwives' Bill will cease, for this session, to interest either legislators or doctors." Now the English Bill is so nearly on the lines of the Bill under our notice that the objections to the one will, *mutatis mutandis*, serve equally as against the other. And I have freely culled from the correspondence on the English Bill where I have considered the remarks applicable to the present case. The Bill is a short one, and I will read it through. (See p. 483.)

This is a Bill to promote the better training of women as midwifery nurses. And Clause 2 defines a midwifery nurse as a woman who undertakes to attend in

cases of natural labour. So it would appear that the midwifery nurse is a mixture of monthly nurse and midwife, intended to fulfil one or the other functions, or both. Really, the two callings are quite distinct. They require different training, and hold a different relation to the medical practitioner. A nurse always means one who is subordinate to the doctor, who acts under his orders, and has no independent authority. A midwife is one who does not necessarily act under the supervision of a doctor (so long as the case remains uncomplicated). She is individually responsible for the case under her charge. To call her a nurse, with whatever qualifying adjective, is to confuse one who has independent charge with one who has not, but who receives her orders from a superior.

Now the effect of merging these two callings into one and registering them will be to tempt all women who are well qualified, and at present well content to act as monthly nurses simply, to assume the functions of a midwife, for which they have received no adequate training. And this would certainly be the reverse of a benefit to the public. Then as to the definition of natural labour. In an alternative Bill introduced by the British Medical Association, natural labour is defined as a labour which occurs at full term, in which the presentation is that of the vertex, and in which there are none of the following conditions:—

Threatened or present illness; hæmorrhage; narrow pelvis; abnormal position of child, presentation of hands, or feet, or cord with head; disturbance of labour pains leading to delay in birth; excessive pains followed by exhaustion; those cases where a child whose head has deeply descended is not delivered for two hours after the opening of the mouth of the womb and the escape of the liquor amnii; presenting placenta even when the nurse at the moment of examination does not perceive any bleeding; the placenta not being expelled an hour after the child is born; rupture of perineum; twins, multiple births and monstrosities.

I have given this definition of natural labour at length to show how impossible it would be to tell beforehand what case will turn out to be one of natural labour, and also how unlikely it would be for an imperfectly trained midwife to recognise many of the conditions named. The promoter of the bill admits that these nurses will receive but very little training as compared with the training required by a certified hospital nurse, but that it is on that account all the more necessary to register them. We maintain that registration without supervision would be useless, and as we shall see later on there is no provision whatever for supervision.

Clause 3 imposes a penalty of £5 for the assumption of any title implying that as a nurse she is registered, or implying that she is qualified to act as a midwife. This clause merely protects "title," not "practice." Any woman may act as a midwife or nurse for gain if she is careful not to assume the title of registered nurse, or refrains from putting the words midwife or accoucheuse on her card or door-plate, and as such women would probably work more cheaply than the hall-marked article, they would get plenty to do amongst the very poor. They would, moreover, most likely hold a qualification considered by their patients of much more importance than any certificate, namely, that of having had a large family, and a physique proving that they are none the worse for their experience. Of course it may be said that even doctors are not protected in this way, but it is, nevertheless, true that a bill which does not prevent the practice of midwifery by unlicensed persons fails in its object of protecting the poorer classes, and should, therefore, be opposed.

Clause 4 states that registration of a midwife gives no right to assume any title implying that she is by law recognised as a medical practitioner. This may be regarded merely as a "pious opinion," but it imposes no penalty whatever if she chooses to disregard the statement. Mrs. Garrett Anderson remarks, in a letter to the *Times*, that it would be absolutely impossible to prevent a midwife who has a perfectly independent position from practising medicine as well as midwifery. No self-respecting, ignorant, clever woman, she continues, would refuse to administer all she thought likely to be of use to both mother and child whilst under her care. She would feel herself quite equal to ordering grey powder, castor oil, eye lotions, belladonna plasters, etc., and she would assuredly do so. Then when in course of time the child has measles or whooping cough what so natural and easy as to send for her again.

Clause 5, Sub-section 1, states that any woman who, at the passing of this Act, has obtained a certificate from some institution approved of by the Central Board, shall be entered on the Register on payment of the fee.

Take the case of a woman newly arrived in New South Wales, holding a certificate from, say, the Rotunda Hospital, dated some years ago. What proof is required that she is not an abortionist and of utterly bad character? No one is able to speak for her here. Her references may be forged and her certificate is ten years old, and yet the board have no option but to register her if she demands it.

Sub-section 2 states that other women who have practised as midwives for at least a year, and produce a certificate from one medical practitioner, shall also be registered if they demand it. This short period of previous work required, and the ease with which a certificate of character from one medical practitioner could be obtained, will flood the ranks with hundreds of incapable people which it will take years to work off.

Clauses 6 and 7 name the Board of Health as the authority for prescribing the necessary examinations and registering. Now the Board of Health is composed largely of non-medical men, and the first of the duties named should certainly be undertaken by a board which is wholly medical.

The Board of Health moreover has functions which are quite alien to those in question—functions which already severely tax the machinery available, and which are becoming more exacting every day.

If complaints are lodged with the Board of Health against any nurse, that body has no authority to examine witnesses on oath, and if on that account or on any other it came to a wrong decision, the Board would be liable to an action for damages in a Court of Law for removing the name from the register. Moreover, the Board of Health could not possibly exercise any supervision over its registered nurses. Indeed, the Bill does not provide for supervision of any sort—a very serious omission, and one which renders it valueless as a protection to the public. In England, at the invitation of the Lord President of the Council, the General Medical Council gave their views on the Bill. They affirmed:—

That it is desirable that measures should be taken to protect lying-in women of the poorer classes from the grave risks which they now incur from the unqualified practice of midwives, many of whom are ignorant and unskilful, and most of whom pursue their calling without due medical supervision.

That to this end it is desirable that every woman who, not being a registered practitioner, engages for gain in the practice of midwifery, should be subject to legal supervision and control.

That any measure which proposes merely to protect the title of midwife, however defined, and does not make illegal and penal the unlicensed practice of midwifery for gain, cannot be regarded as offering an adequate safeguard in the interest of the public health.

In so far as the Bill submitted to the Council is not in accord with the general principles so laid down, the Council do not regard it as offering an adequate solution of the question under consideration, and would earnestly deprecate its passing into law in its present form. This opinion appears to have given the death blow to the Bill.

We will now consider for a few moments how this Bill would affect the medical profession. One correspondent, and one only, seems to regard it as a boon and a blessing to medical men. He quotes:—"Every thing that is, is for the best in this best of all possible worlds." How many men are there who would not regard the attending of a confinement as a duty they would gladly transfer to another? In future the irksome task will become unnecessary! The teaching will make up for it." I suspect this gentleman is a wag; but for all that it might well express the views of a smug and prosperous G.P., who having made his position, cares little for the fate of his younger and struggling confrères. How would the Bill affect them? One writer, living in a locality where there are licensed midwives, says:—"My experience is that these women commence with the poor and then drift into the class that can afford to pay a medical man and a nurse, and leave the poorer patients to the old-fashioned untrained nurses, midwives, or friendly neighbours. What the poor lying-in woman requires (he continues) are properly-trained nurses such as the East London Nursing Association provides, and not an inferior, half-educated midwife, who will not condescend to attempt to keep the patient clean. Why? She is a midwife, not a nurse. This is not speculation, it is the result of experience. He goes on to say: "The only conclusion to be arrived at after a careful study of the Bill and the correspondence on it is that if it becomes law it will be very injurious to the poorer classes, a great loss of income to the general practitioner, and a return to the old days when medicine and surgery were dissociated from midwifery, and finally help and swell the income of examiners and licensers of the new order of legalised quacks."

Then how would it affect our women graduates? Mrs. Garrett Anderson in her letter to the *Times*, before quoted, and speaking as the representative of medical women, observes that they would suffer more from a class of independent registered midwives than medical men; for a medical woman would be more readily confounded with a midwife in the minds of ignorant people, and many patients would expect her to take the fee of a midwife rather than that of her medical colleagues. She also points out that a woman registered as a midwife would be as independent in her work as a medical practitioner, and the Bill would in fact create a class of practitioners in midwifery only. This she shows would be disadvantageous to the public, since if a certain number of medical practitioners are needed for the difficulties of midwifery, they must not as a preliminary be deprived of the great majority of ordinary cases. Here we see one writer referring to the loss of income, and another to loss of necessary experience likely to be suffered by medical practitioners as the result of the Bill; but we must also remember that humble midwifery has always been regarded as the stepping-stone to family practice. In this domain a young man has the opportunity of proving that he has the patience, kindness

of disposition, and sympathetic manner which is sure in time to make for popularity. I need hardly refer to the advantage which would be taken of the licensed midwives by the lodges and friendly societies.

Such, Mr. Chairman and gentlemen, are some of the objections to the proposed Bill. Others will, no doubt, occur to the speakers who will follow me. I admit that many of these arguments would be of little avail if brought against the Bill in the Legislative Assembly. They would be set aside because urged in the interests of the doctors—that would be quite enough. But to-night, Mr. Chairman and gentlemen, we are not at all attempting to influence the Lower House or the public. We are endeavouring to convince, if such an endeavour could possibly be necessary, one of our own number, who has also the honorable distinction of a seat in the Legislative Assembly, that his medical confrères consider the Bill to be a mistake.

I therefore beg to move that this meeting objects to the Midwifery Nurses' Bill becoming law, on the ground that its alleged advantages to the public are more than outweighed by the fact that it is injurious to the interests of the medical profession.

Dr. FIASCHI seconded the resolution.

The discussion was carried on by Drs. Foreman, Thring, O'Neill, Milford, Gladden, C. Read, Schrader, Warren.

Dr. GRAHAM, in reply, said: In introducing this Bill he had sought in his own humble way to render a service to the profession, and not to create an instrument that would deprive it of any of its privileges. The Bill was introduced at the suggestion of some members of the profession, as it was thought that to obtain any system of regulation and control over the present army of midwives was better for all concerned than the present chaotic condition. He could not help thinking that the opponents of the measure were needlessly apprehensive of the bad effects that a law of this kind would bring about. It was well, at least, to make sure that our breadth of view was not contracted and clouded by any of our old prejudices. The chief principle of the Bill was that which compelled all women who were now acting as midwives, and all who desired to act as such in the future to have their names placed on a register. Registration was a necessity in any system of control, and where some tests of efficiency were desirable it was a link in the education chain. The argument used against registration was that you gave a legal hall-mark to an imperfectly educated class, and so created an inferior order of practitioners, who would gradually assimilate that important branch of medicine known as midwifery. The answer to that was that the inferior order now existed, and had existed for centuries; that with all their faults and failings the public did not hesitate to employ them. It was true that registration might in time have the effect of furnishing the public with a better instructed type of midwife, and if that was so then the reason became all the stronger why they should be registered, unless we are prepared to admit the more ignorant she is, the better and safer midwife she makes. It did sound strange to hear anyone say that registration would create a new class, when we knew that the midwife was one of the most fixed institutions amidst the order of social affairs. She could no more be created than she could be obliterated—she is the product of human necessity—like Topsy of old she was not born, but "grewed," and whether she was acceptable to us or not we had to bow to the inevitable, and to grin and bear it, by putting up with her. The midwife occupied a unique position, a position which differed entirely from

that occupied by the surgical and medical nurse, because it falls to the lot of the former to look after a parturient woman often without receiving any instructions from a medical practitioner; while the latter type of nurse always acts under instructions. Acting "under instructions" is the proper sphere for every nurse, be she midwifery or general, but custom and usage—a custom born of ages has permitted the midwife to act by public consent "on her own." For that reason a test of character and a test of fitness were all the more necessary as applied to the midwife, and how could we better secure such qualifications by means other than registration. It seemed to him that we were all agreed that it is expedient that the woman who follows the calling of midwife should be a sober, respectable person, instructed in the general principles of obstetric nursing, but the parting of the ways amongst us was reached, whenever we proposed to publicly brand her as fit and respectable—because that was what registration after all meant. A fear had been expressed that a measure of this kind would prove a hardship to the young practitioner, inasmuch as his chances of attending cheap midwifery would be gone. From his point of view the effect of the Bill would just work out the other way. There would be fewer women following the calling of midwives, for the tests of character and fitness would choke off a large number of those "worthies" who trade on the title of "qualified ladies' nurse." Moreover, the result of properly instructing midwives would, to his mind, have the effect of impressing on these women what is their proper place, and what is the limit of their responsibility. She would come more and more to know, and to realise as clearly as the surgical nurse now does, that the obstetric nurse was only the eyes and hands of the doctor in his absence, and that she had to look to him wholly for instructions. The other points in the Bill seem to him to be of minor importance compared to the principles of registration. The definition of natural labour, about which so much had been said, was a point of academic hair splitting which did not affect the main question. Clearly what was meant by such a clause was that the obstetric nurse would be exceeding her duty, and would bring herself within the pale of the law if she took upon herself the responsibility of conducting any complex or difficult case. Another objection taken to this measure was that it would tend to give the midwife a professional status only a step less exalted than the medical profession. It has always been considered a proper thing by us to afford women an opportunity of learning the art of midwifery, and of testifying, by certificate, that they were qualified to act as midwives if they passed a satisfactory examination. No one has ever attempted to maintain that it was wrong for these women to be let loose upon the public, and allowed to follow the calling of midwives for habitual gain, and yet, when there was an attempt to further protect the public by making every midwife give some proof of having been instructed, there was at once a hue and cry about creating a new and inferior class of practitioner. It hardly seemed necessary for him to deal in detail with the numerous objections that had been raised. It should be borne in mind that the Bill distinctly states that the midwife was not a medical practitioner, and was not entitled to any of the rights and privileges of the medical profession, and, moreover, it empowered the Registration Board with the right to fix such a standard, and to make such regulations as they may deem fit, and to remove her name from the register for any good cause. The Registration Board is one composed of more medical men than laymen, and so it might be truly argued that the midwifery

nurse under this Bill would be placed practically under the control of the medical profession. We truly deserve to have it said of us that "doctors differ," when we are found at variance on a point that is obviously so advantageous to us as a body.

The motion was then put and carried with only five dissentients.

Dr. GRAHAM then moved the following motion, which was carried:—"That this meeting approve of the general principle of the Bill; that the council of the N.S.W. Branch of the British Medical Association be empowered to act with the gentlemen in charge of the measure with a view to the insertion of such amendments as would make it more generally acceptable to the profession."

THE MIDWIFERY NURSES' BILL, WITH AMENDMENTS SUGGESTED BY A COMMITTEE COMPOSED OF THE COUNCIL OF N.S.W. BRANCH OF THE BRITISH MEDICAL ASSOCIATION AND DR. GRAHAM, AND APPOINTED AT A MEETING OF THE PROFESSION ON 25TH OCTOBER.

AN act to promote the better training of women as midwifery nurses, and for their registration as such.

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and Legislative Assembly of New South Wales in Parliament assembled, and by the authority of the same, as follows:—

Short title.

1. This Act may for all purposes be cited as the "Midwifery Nurses Act, 1898."

Definitions.

2. In this Act—

The term "midwifery nurse" means a woman who undertakes to attend in cases of natural labour.

Clause 2, line 3—after "attend" insert "habitually and for gain." After "labour," line 4, insert "in accordance with schedule 1 in this Act."

"Midwifery nurses register" means a register of midwifery nurses kept in pursuance of this Act.

Registration.

3. (1) From and after the first day of January, one thousand eight hundred and ninety-nine, no woman shall be entitled to take or use the name or title of licensed, certificated, or registered midwifery nurse or midwife (either alone or in combination with any other word or words), or any name, title, or description implying that she is registered under this Act, or is specially qualified to act as a midwife, unless she is registered under this Act.

Clause 3, sub-section 1, line 8—omit "specially." Omit "midwife" insert "midwifery nurse."

- (2) If any person acts in contravention of this section, that person shall be liable, on summary conviction, to a fine not exceeding five pounds.

Clause 3, sub-section 2, line 1—omit "this section" insert "sub-section 1 hereof."

Clause 3, sub-section 2, line 2—after "liable" insert "for a first offence." Omit "on" insert "upon."

Clause 3, sub-section 2, line 3—after "pounds" insert "and for any subsequent offence to a fine of twenty pounds, or to be imprisoned for a term not exceeding six months."

New sub-section 3—(3) Any person who, after the first day of January, one thousand eight hundred and ninety-nine, and whose name is not upon the register provided under this Act, shall for gain attend, or undertake to attend, any

lying-in-woman, shall be liable on summary conviction for a first offence to a fine not exceeding five pounds, and for any subsequent offence to a fine of twenty pounds, or to be imprisoned for any term not exceeding six months.

(3) Nothing in this section shall apply to legally qualified medical practitioners.

Clause 3, sub-section 3 to be sub-section 4.

Privileges of registration.

4. A woman shall not, by reason of being registered as a midwife under this Act, have any right or title to be registered under the Medical Act, 1855, or the Acts amending the same, or to assume any name, title, or designation implying that she is by law recognised as a licentiate or practitioner in medicine or surgery, or that she is qualified to grant any medical certificate, or any certificate of death.

Clause 4, line 2—omit "midwife" insert "midwifery nurse."

Clause 4, sub-section 1—insert "(1) Any woman registered under this Act who undertakes the treatment of any disease or injury for gain shall be liable on summary conviction to a fine not exceeding five pounds."

Provision for existing midwives.

5. Any woman who at the passing of this Act—

- (1) has obtained a certificate in midwifery from some hospital, dispensary, or obstetrical society approved of by the Board of Health of New South Wales, or
 - (2) who has been in actual practice in New South Wales as a midwife for a period of not less than one year and produces a certificate from one legally qualified medical practitioner approved of by the Board of Health registered in New South Wales that she is a person of good character and qualified to act as a midwife,
- shall be entered on the midwives' register at a fee of two shillings and sixpence.

Clause 5, sub-section 1, line 4—after "Wales" insert "and give a satisfactory proof of good character or."

Clause 5, sub-section 2, line 3—omit "one" insert "three."

Clause 5, sub-section 2, line 4—omit "one" insert "two." Add "a" to "practitioner."

Clause 5, sub-section 2, line 7—omit "midwife" insert "midwifery nurse."

Clause 5, line 13—omit "shall" insert "may." Omit "midwives" insert "midwifery nurses."

Midwives' register.

6. Every woman who passes the examination prescribed by the Board of Health shall be entered on the midwives' register at a fee of two shillings and sixpence.

Clause 6, line 1—after "who" insert "presents the certificates specified in the second schedule of this Act and"

Clause 6, line 3—omit "midwives" insert "midwifery nurses."

Rules respecting the examination of midwives.

7. For the purpose of the examination of women desiring to be registered as midwives, the Board of Health shall, as soon as may be after the passing of this Act frame, subject to the approval of the Governor in Council, rules regulating the method and subjects of the qualifying examination, and the general standard to be attained by persons passing the examinations, with a view to secure the possession of adequate knowledge and skill in midwifery by all persons who pass such examinations, and such other matters as may be required for the carrying out of this Act. The rules shall provide for the examinations being held, so far as possible, at such places as will enable persons to be examined within a reasonable distance from the place where they reside.

Clause 7, line 2—omit "midwives" insert "midwifery nurses,"

New sub-section—Clause 7, sub-section (1) For the purpose of subsequent supervision of persons registered as midwifery

nurses the Board of Health shall, as soon as may be after the passing of this Act, frame, subject to the approval of the Governor-in-Council, rules necessary for such purpose, and shall appoint the Government medical officer or public vaccinator or other medical practitioner as the local supervising officer over midwifery nurses in each district, and provide for the remuneration of such officer by fees or otherwise.

Fees and expenses.

8. There shall be payable by every woman presenting herself for examination a fee of ten shillings. Should a candidate fail to pass, then for her second or any subsequent examination the fee shall be five shillings. All fees paid by midwives and candidates shall be paid into the Consolidated Revenue Fund.

Clause 8, line 5—omit "midwives," insert "midwifery nurses."

Publication of register.

9. The Board of Health shall cause a new addition of the register kept by them under this Act to be printed and published on the first day of January in each year, and a copy of such register for the time being shall be evidence in all courts that the women therein specified are registered according to the provisions of this Act, and the absence of the name of any woman from such copy shall be evidence, until a contrary be made to appear, that such woman is not registered according to the provisions of this Act: Provided always that in the case of any woman whose name does not appear in such copy, a certified copy under the hand of the president or secretary of the Board of Health of the entry of the name of such woman on the register shall be evidence that such woman is registered under the provisions of this Act.

Removal from the register.

10. If any midwifery nurse shall be convicted of any felony or misdemeanour, or shall, after due inquiry, be judged by the Board of Health to have been guilty of infamous conduct in any professional respect, the Board may, if they see fit, direct the secretary to erase the name of such midwifery nurse from the register.

Clause 10, line 4—omit all the words after "guilty" insert "in cases where the attendance of a duly qualified medical practitioner can be obtained, of using obstetrical instruments or of performing any manual operations on the fetus within the uterus or otherwise to have been guilty of grave misconduct in respect of her duty as a midwifery nurse the Board shall direct the Secretary to erase the name of such midwifery nurse from the register."

Restoration to the register.

11. The Board of Health may, after due inquiry restore to the register the name of any midwifery nurse removed therefrom.

Penalty for wilful falsification of register.

12. Any person who wilfully makes or causes to be made any falsification in any matter relating to the register of midwifery nurses shall be deemed guilty of a misdemeanour, and shall be liable to a fine not exceeding twenty pounds, or to be imprisoned with or without hard labour for any term not exceeding six months.

Right of appeal.

13. If any person shall feel aggrieved by any determination or decision whatsoever, either with reference to a penalty or the refusal of registration under this Act or the erasure of her name from the register, may appeal to any Supreme or District Court Judge, but no such appeal shall be entertained unless it be made within four months next after the making of such determination or decision either with reference to a penalty or the refusal of registration or the erasure of her name from the register next after making of such determination, decision, or refusal of registration, or

the erasure of her name from the register, nor unless ten days notice in writing of such appeal stating the nature and grounds thereof be given to the party against whom the appeal shall be brought.

Clause 13, line 10—omit "next after making of such determination, decision, or refusal of registration, or the erasure of her name from the register."

SCHEDULE I.

Definition of Natural Labour.—Natural labour for the purposes of the Act and of this appendix shall be held to mean a labour which occurs at full time, in which the presentation is that of the vertex, and in which there are none of the following conditions:—

Threatened or present illness.

Hæmorrhage.

Narrow pelvis.

Abnormal position of child.

Presentation of hands or feet or cord with head.

Disturbance of labour pains leading to delay in birth.

Excessive pains followed by exhaustion.

Those cases where a child whose head had deeply descended is not delivered for two hours after the opening of the mouth of the womb and the escape of the liquor amnii.

Presenting placenta even when the nurse at the moment of examination does not perceive any bleeding.

The placenta not being expelled an hour after the child is born.

Ruptured perineum.

Twins, multiple births, monstrosities.

SCHEDULE II.

For the purpose of examination women desiring to be registered as midwifery nurses must present the following certificates:—

1. Of having been trained as medical and surgical nurses for a period of two years in one of the general hospitals of the colony containing not less than fifty beds.
2. Of having attended for six months the practice of a lying-in hospital of not less than twenty beds.
3. Of attendance on at least twenty-four cases of practical midwifery.
4. Of attendance on a course of not less than twenty-five lectures on midwifery.

PROCEEDINGS OF BRANCHES.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular monthly meeting of the Branch was held at the Royal Society's room on Friday, 28th October, 1898, at 8.15 o'clock, Dr. Wm. Chisholm (president) in the chair. There were also present: Drs. Hankins, Crago, Fiaschi, Knaggs, Wright, J. B. Nash, Paton, Wilkinson, Sinclair Gillies, Gledden, McDonagh, Gordon Craig, Goode, Morgan Martin, G. A. Marshall, Hinder, Mills, Traill, J. Parker, Thring, A'Beckett McCarthy, Allan, Isbister, Worrall, J. A. Dick, Bucknell.

The minutes of the previous meeting were read and confirmed.

THE PRESIDENT announced the election of Dr. R. J. Millard, of Goulburn, as a member of the Association.

Dr. J. B. NASH exhibited a case of Schede's thorax re-section. The patient was examined by the members. J. C., *æt.* 30 years, coal miner and labourer.

This man first came under my observation on the 4th March, 1897. He was sent to me by Dr. Stapleton. He was in an emaciated condition, with an opening in the skin just below the left nipple, and he complained of a free discharge of matter from this point. He said that an abscess formed beneath where the opening now is, that it was opened by a doctor, and it had been discharging for many months.

On examination the sinus led to a cavity of considerable extent within the chest wall.

First Operation.—On March 11th I made an incision beginning just outside the left nipple line, and on a level with the third rib. This was continued vertically to the eleventh costal cartilage. It was taken across the chest, and at the posterior axillary line it began to

ascend obliquely, and terminated at a point about the level of the fourth rib, and midway between the posterior border of the scapula and the spinous processes of the vertebrae. The incision went through the skin and muscular tissues, and the flap, with the contained scapula and its muscles, was drawn upwards by raising the arm above the head and everting the edges. This exposed pretty fully the chest wall, and I cut through the fifth, sixth, seventh, eighth, and ninth ribs near their costal cartilages, and freeing them as far backwards towards their tubercles as possible, by twisting the bones broke off at this point. The chest wall, consisting of the intercostal muscles and greatly thickened pleura with allied anatomical structures, indistinguishably bound together by a matting process, was opened, and with knife and scissors it was cut away to the whole area of the ribs removed. The large space left was covered over by bringing down the flap and suturing the edges.

On the margins of the incision there were numerous blood vessels that had to be compressed and tied, but in the chest wall proper there were no bleeding points. The arteries and veins had been quite obliterated by the pathological processes, which rendered the tissues to view one tough white mass.

The cancellous tissue of the bones removed was soft and breaking down except at the posterior end, the pus was of a pink colour, and only the hard shell was in many places left intact.

His general condition soon began to improve, though the edges of the wound remained approximated only at some points.

Second Operation.—On November 3rd I opened up the original incision, and through it the fourth rib was taken away. Some portions of bone that had been left attached to the cartilages had to be cut out. Much of the cartilages was likewise dealt with, and those portions of the indurated costal wall which had been left were now thoroughly detached with knife and scissors. Thus the space between the third and tenth ribs vertically, and from the margin of the sternum to the transverse processes of the vertebrae laterally, was freed of all diseased material. The flaps were approximated as before.

From this on he made an uninterrupted recovery.

In order to fill up some gaps in the healing process he was given chloroform on several occasions. The extent of ribs taken away measured about 62 inches, equal to 155 cm., and the costal wall was in places about 3 cm. thick. The pericardium was exposed at the two operations, and the pulsations of the heart within it were interesting to watch. He suffered no particular shock. Spinal curvature is not a marked phenomenon in the case at the present date, which is twenty months after the first operation. While the three upper ribs are *in situ*, and the tenth rib intact, there appears to me little reason why curvature should occur.

When examining this man a few days since he told me that his right chest is now much stronger than ever it was. He is able to walk well and do ordinary light work, gardening, chopping wood, and such like.

Breathing can be heard, and a resonant note demonstrated, at the part of the chest above the third rib. He therefore has a part of the left lung working, and as time goes on it is probable that it may be of more use to him. The dome of the diaphragm has become attached to the lower margin of the third rib, from the anterior part of the wall of the mediastinum in front to the vertebral column. Thus a space exists at the upper part of the left chest, bounded by costal pleura on all sides, and this tissue is supported below

and for the most part externally, by a portion of the upper surface of the diaphragm, the muscle being immoveable and extending from its ordinary points of origin to a fixed line at the third rib. Its upper and outer muscular fibres extending from the pericardium to the cartilages of the ribs and to the spine form a base against which the muscles and skin now rest.

Great assistance was given to me in the treatment of the case by Dr. Stapleton, of Lambton. And to the nursing ability, ceaseless attention to detail, and devotion to duty of Miss Dwight (the then matron of the Wallsend Hospital) and Nurse Fraser, are in a great measure due the patient's continuous progress towards convalescence. At no time during the case was there any rise in temperature.

Dr. GLEDDEN said he assisted Dr. Nash at the Wallsend Hospital when the first operation was performed. He had not seen the man since, but at that time he presented a miserable appearance. It was surprising to see him walking briskly down the room to-night. At the operation six ribs were removed; the exposure was very extensive.

Dr. WILKINSON said most cases of the kind were of tubercular origin. This case no doubt was of that character. The members had reason to be thankful to

Dr. Nash for having exhibited the patient and explaining the operation. There was a very large future before the profession in dealing with such cases.

Mr. HANKINS said the case was most interesting. During the whole time he had been connected with Prince Alfred Hospital he had not seen such an extensive operation of this character. He (Mr. Hankins) had removed about four inches each of five ribs, according to the method of Estlander, with satisfactory results. This case will encourage surgeons to follow Dr. Nash's example in suitable cases.

Dr. THRING said he did not quite agree with Dr. Wilkinson that this case was one of tubercular origin. He (Dr. Thring) remembered one operation he had performed, the removal of the second to the eighth rib. It was not so extensive as Dr. Nash's. There could be no question such extensive cases should not occur if the empyema was dealt with at an early stage of the disease.

Dr. MILLS said he did not see why this case should not be of tubercular origin. Most cases of empyema were tuberculous in character. In Fowler and Godlee's book Fowler maintains that most cases of pleurisy with effusion, generally ascribed to "chill," were tubercular in their origin.



DIAGRAMS TO ILLUSTRATE DR. NASH'S PAPER.

Dr. SINCLAIR GILLIES was opposed to the view that in this case the origin of the disease was tubercle. He thought it most likely the result of staphylococcus or pneumococcus infection, because the empyema ran an acute course and "pointed." Tuberculous empyema was more chronic and passive in character.

Dr. NASH, in reply, said: Dr. Wilkinson raised the question of a tubercular infection in this case. From a clinical standpoint the diseased condition of the bones seemed to me to be more of the type of a streptococcal infection than that of the tubercular bacillus. There was no caseous material. The chest wall was tough, not of the consistence of cartilage, yet it was hard to cut, and it was firmly fixed to the third and tenth ribs. What Dr. Thring remarked, to the effect that these cases should not be if the empyema had been dealt with at an early stage, reminds me of what Sir Hy. Thompson says, "That stones should not grow in the bladder." Certainly, but there will always be a certain proportion of persons who will not seek medical aid until an accumulation of pus in the chest belongs to the class "empyema necessitatis," or until a vesicular calculus is of considerable size.

Dr. SINCLAIR GILLIES read some notes on "Three Cases of Epidemic Cerebro-spinal Meningitis." (See p. 470.)

Mr. HANKINS said the very able manner in which Dr. Gillies had worked out this series of cases might be regarded as a tribute to his (Mr. Hankins') sagacity in requesting him to undertake the task. Although the cases all presented more or less the symptoms of cerebro-spinal meningitis, the interesting point was their relation one to the other. I believe that epidemic cerebro-spinal meningitis as it occurs, for instance, in Dublin, is unknown in the colonies; and there was certainly nothing like an epidemic, as we generally understand the term, in Sydney or in the neighbourhood of the house in the present instance. There was apparently direct infection from one patient to the other. It is stated that the same organism will produce cerebro-spinal meningitis and influenza, and it is noteworthy that the aunt who had been nursing the last case sickened within a few days with what was apparently influenza of a neurotic type, and she had not recovered strength at the end of two months. With regard to the diplococci found in the throat culture, the exact species of which was not made out, I should state that Dr. Isbister's opinion was only asked as to the presence of diphtheria organisms.

Dr. THRING said very few cases of this character are heard of. All the time he had been connected with the Lewisham Hospital and the Infants' Home at Ashfield he did not remember dealing with a single case of this kind. Under such circumstances one was likely to overlook the symptoms of such rare cases. He thought that the term "influenza" was often only a cloak for faulty diagnosis, and that many of its forms might be owing to distinct organisms, and be in reality distinct diseases.

Dr. WILKINSON said Dr. Gillies had brought forward a series of very interesting cases. He did not agree with Mr. Hankins' criticism of the term "epidemic." Epidemics of cerebro-spinal meningitis were always very limited in extent. The greatest record of localised epidemics was fifteen cases. Dr. Gillies was fortunate in having these cases under his care. He might be able to exhibit a cultivation later on. Dr. Wilkinson thought that infection in such cases was not by the circulation, but direct to the brain through the nasal air passages.

Drs. FIASCHI and ISBISTER read "Notes on a Case of Amœbic Abscess of the Liver and Lung." (To appear in a future issue.)

Dr. GOODE said the members were greatly indebted to Drs. Fiaschi and Isbister for the interesting case reported. It was a rare condition. He had seen the specimens at the Sydney Hospital. The great difficulty in such cases was stopping the inroads of the amœbeæ. He (Dr. Goode) had seen a great deal of Dr. Isbister's work in connection with this particular case, and the experiments were of the most interesting character; and Dr. Isbister deserved thanks for the care and trouble in preparing and dealing with the tests. Dr. Fiaschi also was to be commended for introducing this comparatively new subject.

Dr. CHISHOLM congratulated Dr. Isbister on the work he had done in this case.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting was held in the Rooms, Austral Buildings, on Wednesday, October 26th, at 8 p.m. Present: The President (Dr. McAdam) in the chair, and Drs. Meyer, McGee, Kent-Hughes, Springthorpe, Gertrude Halley, Janet Greig, Jane Greig, Martell, R. H. Strong, A. L. Kenny, Nihill, Willis, Thomson, and Black.

The minutes of the previous meeting, as reported in the *Gazette*, were confirmed.

Vote of Condolence.—The President moved that a letter of condolence be sent from the Branch to the relatives of the late Dr. F. S. Crowther, whose promising career had been cut short by his unexpected death within a week of his starting practice at Warracknabeal. The motion was seconded by Dr. Meyer, and carried in silence.

Correspondence.—The honorary secretary reported the formation of a District Branch in the Goulburn Valley, and read a list of the names of eighteen foundation members. This was the third District Branch formed this year, the previous ones having been Launceston (thirty members) and Ballarat (twenty members), and there were two others in progress of formation. Such a spread of the influence of the Branch was exceedingly encouraging.

EXHIBITS.

1. Dr. KENT-HUGHES exhibited an unusual case of cataract, and a case of congenital absence of the right fibula, in which operative measures of unusual difficulty had led to a satisfactory result.

2. Dr. GERTRUDE HALLEY exhibited an interesting case of coloboma; complete in one eye, and incomplete in the other. The President congratulated Dr. Halley on this, the first exhibit by a lady member of the Branch.

3. Dr. J. H. MCGEE showed an interesting case of acquired displacement of the heart to the right. The patient, a railway porter named William Larcombe, aged 33 years, was a sturdy, well-built man, weighing 10 stone. His family history contained nothing pathologically significant beyond the death of a paternal uncle from phthisis. Patient sickened first in 1889, and went to his doctor complaining of pain through the right side of the chest from the angle of the scapula to the breast. Exploration with a needle showed the presence of a red fluid, which seven subsequent punctures failed to rediscover. The man then went back to his duties, and for some years worked at Bullarto, experiencing very cold winters, and lifting much heavy luggage. From the year 1892 onwards he suffered from repeated sore throats, and for the last twelve months has been aphonic. He came to

Melbourne for special advice about his throat, and Dr. Kent-Hughes kindly sent him to Dr. McGee. There was no history of specific disease, of palpitations, nor of precordial anxiety, etc., etc. The chest was well developed, but flattened and less mobile on the right side, and, on measurement, one inch smaller than the left, though the patient was right-handed. Palpation was of no value, owing to the aphonia. There was modified dullness over all the right side of the chest, except for a band of resonance an inch wide along the sternum in front and the vertebræ behind. Part of the anterior half of the lowest lobe was resonant, and the posterior half absolutely dull. An area of absolute dullness, which merged into the hepatic area below, was easily marked out just internal to the right nipple, and extending inwards to the resonant area, one inch from the sternum. (The left side of the chest and the sternal portion were all resonant). A heaving impulse was noticeable over the dull portion of the chest, having its point of maximum intensity just internal to the right nipple. The stethoscope revealed a few dry crepitations at the right apex, and along the upper margin of the lowest lobe in the right axillary line. In the second and third intercostal spaces in the front Dr. McGee had elicited the sign which Habershon describes as pathognomonic of a cavity, viz.:—"Post-tussic suction." The normal breath sounds were audible all over the left chest. Just internal to the right nipple the heart sounds were heard at their loudest, without any apparent alteration in character, or associated murmur, and in the third intercostal space, two inches to the right of the mid-sternal line, the aortic and pulmonary valve sounds were to be heard loudest. The liver occupied its normal position, and the spleen was in its proper position, though slightly larger than normal. The œsophagus lay to the left of the vertebral column, and its position was easily defined by auscultating during deglutition. The pupils were equal, as were the carotid and the radial pulses. The arteries were not atheromatous, and there was no protrusion of any part of the chest, and by the nature of the cardiac impulse, and the auscultatory phenomena, it was possible to exclude aneurism. The case thus remained one of old-standing phthisis, with excavation of the right apex, right pleurisy, and consequent shrinkage of the affected lung. Atmospheric pressure determined the expansion of the left lung, which displaced the heart, and invaded the right side of the chest.

The points of interest in the case were:—The extreme displacement without any inconvenience to the patient, and without its previous detection by the physicians who had charge of him; the absence of physical signs pointing to any twisting or kinking of the vessels, and the fact that the heart was maintained in its new position by atmospheric pressure acting through the left lung.*

Dr. SPRINGTHORPE remarked upon the frequency with which pleural effusion was the precursor of pulmonary phthisis. He had made a point of investigating all such cases for years past with tuberculin, examination of sputum, subsequent history where obtainable, etc., and all pointed to the same conclusion, that pleural effusion was almost always tubercular, when not the result of other generally easily-recognisable causes; and, corroborating Dr. de Havilland Hall and others, such tubercular disease was generally fairly rapid, a point of great importance in life assurance. Dr. Springthorpe also reported two recent cases of dextro-

cardia—one, due apparently to old pleural adhesions, and giving rise to no marked trouble for years, the other, admitted early, thrice tapped early, with the gratifying result that the apex finally came back from the right nipple to almost its normal position.

Dr. WILLIS, from country experience, emphasized the relation between pleural effusion and tubercle. He had proved them almost always associated.

Amendments in The Poisons Act, 1890.—The hon. secretary read a letter from the Secretary to the Pharmacy Board *re* the proposed amendments in The Poisons Act, and asking for the co-operation of the Branch.

A discussion thereon was introduced by Dr. Springthorpe, and taken part in by the President, Dr. Kenny, Martell, Black, Willis, and Kent-Hughes. During the discussion, it was pointed out that, in addition to the safety of the public and the privileges of chemists, the rights of the medical profession were concerned, and that matters of mutual interest came up for consideration and even fresh settlement. It was also pointed out that fresh matters, such as the continued selling of morphia and cocaine without continued initialing or order by the medical attendant (thus leading to morphinism and cocainism) might well be urged upon the notice of the Government. After considerable discussion, it was agreed that the subject was too important and complex to decide hastily upon, and it was finally resolved that the matter be left in the hands of a small sub-committee consisting of the President, the Hon. Secretary, Dr. Springthorpe, Kenny, and Willis, with power to add to their number, and to take such action as they deemed most desirable.

SPECIMENS.

DR. KENT-HUGHES showed (a) two loose cartilages removed from the knee-joint—one of very unusual size; (b) a sarcoma of the eyelid, eye and orbit removed, from a child thirteen days old. The base of the brain was also implicated, and death had ensued.

The meeting then adjourned.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY Meeting held on October 27th, 1898. Present: The President (Dr. Swift), Drs. Lendon, Borthwick, Morgan, J. C. Verco, H. M. Evans, W. A. Verco, Cavenagh-Mainwaring, Poulton, Norman, J. A. G. Hamilton, Fischer, Gunson, Marten, Henderson, Way, Evans, Michie, A. A. Hamilton, G. C. Hayward, Professor Watson, and the Hon. Secretary (Dr. Hayward).

Dr. HUMPHREY MARTEN showed two cases of "Actinomyces Hominis," which had occurred in his practice. One was a gentleman, aged 39, who was under treatment during 1894, 1895, and 1896 for the "Ray fungus," which had caused great destruction in the left thigh, but which was now quite well, and had been treated by 330 grs. of iodide of potash daily. The disease was contracted when spending a holiday on the banks of the River Murray, during which time he had slept on a bed made of barley. The second case was a man aged 50, who had been an in-patient of the Adelaide Hospital for between three and four months for what were considered to be sebaceous cysts and lipomata. He stated that he had had discharging sinuses in the sixth right intercostal space for the last two years, with an unhealed incision over the right lumbar region. On examination a line of unhealed sinuses were seen along the right side of the chest in the sixth intercostal space

*NOTE.—A case of congenital dextro-cardia without transposition of the other viscera is reported in the *Lancet* of July 8th, 1893, p. 9.

extending from the posterior axillary line to the nipple line in front, the raw surfaces were covered by a thick yellow pellicle, and there were two sub-cutaneous nodules posteriorly to the line of the sinuses and an open sore over the right loin, along the line of a former incision. A diagnosis of actinomycosis was made, and independently confirmed by Dr. Poulton. The sinuses were scraped out, and one was found to penetrate the sixth intercostal space and enter in an upward direction for two inches into the pleural cavity. The growth was examined microscopically by Dr. Cavenagh-Mainwaring at the Bacteriological Laboratory, and showed unmistakable signs of "clubs" and "mycelium." The patient was at once put on 30 gra. of iodide of potash three times a day, and, although he has only been under treatment for one month the sinuses are rapidly healing up, and the patient is very much improved in every way. This patient lived on the banks of the River Murray, and gave a very clear history of having slept on a mattress filled with barley-chaff just before his illness commenced, but he was obliged to get rid of the bed, as the barley spikelets used to stick in his back and cause him great annoyance. Dr. Marten intends to publish the two cases in full in a future number.

Dr. CAVENAGH-MAINWARING demonstrated the microscopical appearances of the disease.

Professor WATSON showed two specimens of "Actinomycosis of the Liver."

PATHOLOGICAL EXHIBIT.

Dr. LENDON showed a specimen from a case in which criminal abortion had been effected (Regina v. Wilson and wife). There was a sinus behind the cervix uteri leading directly by one route into Douglas Pouch, which contained about an ounce of pus, and by a second tract into the left para-cervical cellular tissue. Death was due to suppurating infarcts of the left kidney and spleen, and appears to have occurred nearly eight weeks after the injury was inflicted. Prisoners to be acquitted on technical grounds.

Dr. EVANS showed a gall stone, about the size of a pigeon's egg, removed *post mortem* from the common bile duct of a multipara, *et. 60*, who died from rupture of the gall bladder during an acute attack of biliary colic. The rupture caused escape of bile into the sub-hepatic space, and consequent peritonitis. The stone was a single one, and could easily have been removed between the attacks of colic, which were frequent; operative treatment, however, was declined.

Minutes of last meeting read and confirmed.

Dr. W. A. VRECO read a paper on "Umbilical Hæmorrhage." Briefly discussed by the President and Drs. Hayward and A. A. Hamilton.

Drs. POULTON, W. T. HAYWARD, and BORTHWICK read papers on "A Case of Empyema," "Empyema: Its Etiology and Treatment," and "Notes on the Bacteriology of Empyema" (pp. 465, 468, and 469 respectively).

The PRESIDENT thought that they were very fortunate in having three such interesting papers on the one subject, and he felt sure that the discussion would be worthy of the subject. Dr. Hayward, in his conclusions, remarked that empyema in the majority of instances—at any rate in children—was not due to a serous effusion becoming purulent, but to a softening or breaking down of lymph thrown out on the surface of an inflamed lung. With this theory he was entirely in accord, but he hoped Dr. Hayward was not advancing it as an original observation, for he had been under the impression that this explanation of the formation of empyema had been generally adopted for many years. It was quite twelve years ago, when working with Drs. Barlow and Angel Money, he had the opportunity

of watching many cases of empyema from their starting point, and of seeing the *post mortem* examinations of cases of pneumonia that had died at different stages of the disease. In some cases they were able to demonstrate the commencing liquefaction or breaking down in the centre of large deposits of lymph, and in one instance specially they could see how easy it would be to have a localised small empyema shut off from the rest of the cavity of the pleura by adhesions, and how possible it would be for recovery after emptying of the cavity of a few drachms of pus by a single aspiration. He noticed that Dr. Hayward advises as a routine treatment that a portion of rib should be removed. He was of opinion that in many instances this was unnecessary. He had been able to drain the pleura, even in very young children of three and two years of age, by a simple incision between the ribs, without subjecting them to the extra risk of removing a portion of rib; and at the present time, when they hoped to be able to remove the drainage tube in a few days, there was all the more reason why the incision should be as simple as possible. Dr. Poulton appears to have diagnosed on his first examination that there was fluid in the pleural cavity, but it was not until fourteen days after that he explored with a needle. He would like to ask Dr. Poulton why he did not put a needle into the chest before that date?

Dr. LENDON agreed with Dr. Hayward in all the essential points raised in his paper. Non-traumatic empyema was, he believed, always a suppuration *ab initio*, never the conversion of a serous effusion. Both in adults, but more especially in children, he recognised the association with acute pneumonia. As regards the details of treatment, he thought that one obtained excellent results almost invariably, whether one merely incised and drained, or washed out the cavity as well. He could not see any objection to the resection of half an inch of rib, which was all that was needed, and he was in the habit of practising a slight variation in the technique which he recommended. After "ringing" the rib, he divided it, and then the periosteum, etc., could be stripped like a glove from each divided end more easily. On the other hand, there were objections to merely inserting a tube between two ribs. In one case he had seen hæmorrhage from sloughing of the intercostal artery, and in another case necrosis of a ring of bone. His only fatal case had been associated with pulmonary tubercle.

Dr. J. C. VRECO said: I recall the circumstance that at a discussion in the Branch some years ago, on the subject of empyema, the opinion was expressed that it was usually such *ab initio*, and not due to puriform alteration of a primary serous effusion. This opinion had been strengthened since then. The fact adduced by Dr. Hayward that in the empyemata, the diplococcus pneumoniae had been detected, and could not be found in the serous pleural effusions, was an advance in our knowledge of the disease, and still further confirmed the above-mentioned opinion. The complaint was thus very closely allied to acute pneumonia, both being associated with the same bacillus. Without doubt some cases of empyema begin with the classical signs of acute pneumonia, and a day or two after the fall of the temperature to normal at the crisis, a recrudescence of pyrexia occurred, and the physical signs of gradually accumulating fluid in the pleura are then manifested, which fluid, on tapping, is found to be purulent. To affirm, however, that every empyema begins necessarily with an acute pneumonia is going too far. In the first place it is going further than clinical experience warrants, for I cannot state that in all cases of empyema I have at first found the evidences of acute

pneumonia. In the second place, it is going further than hypothesis would seem to demand. If we all have the diplococcus pneumoniae in our mouths, and do not all get pneumonia, there must be some power of resistance in our lungs to explain our freedom from the disease; those who contract it get it because this resistance is lowered. Those who get diplococcal empyema may get it because the resisting power of their pleura is lessened. And though this may often be secondary to a primary affection of the lung, yet there seems no reason why it should not be at least possible for the diplococcus to pass through the lung without inflaming it, and start an inflammation of the pleura alone, and so set up a primary empyema. We know that primary pleuritis of other kinds do arise, why not also a diplococcal? The theory propounded as to the origin of the pus in an empyema from softening and liquefaction of plastic fibrin does not quite commend itself. The liquefaction of fibrin does not by any means necessarily form pus. In acute pneumonia the air vesicles are filled with fibrin and cells. During resolution this undergoes liquefaction and absorption, but not pus formation and expectoration; for with an extensive lobar pneumonia there may be during resolution no expectoration whatever. How often in *post mortems* after pneumonia is plastic lymph found coating the inflamed lung. In a case of recovery, if such lymph has been exuded, it must also undergo liquefaction and absorption, but there is no evidence of pus formation. Dr. Borthwick tells us how sometimes in acute pneumonia an abscess forms in the solidified lung, containing pus, and providing abundant diplococci; but none of the ordinary pyogenic bacteria. Why does an abscess not always occur? The diplococcus is always present in the pneumonic exudate. Apparently some other factor is needed for the production of pus. Neither simple liquefaction of exudate nor the presence of the diplococcus is sufficient, else pus would always be formed. So in empyema, why does not this arise in every case of deposit of fibrin masses on the surface of the inflamed lung? The liquefaction occurs in order to absorption, and presumably the diplococcus is present in the lymph. Another agent or circumstance seems to be required to explain the pus formation. Besides, it seems scarcely credible that the enormous quantities of pus, amounting to several pints, have been formed out of liquefied fibrin, even granting that the liquefaction of fibrinous lymph could yield pus, of which I am not quite certain. Dr. Hayward has certainly advanced us a step in our treatment by showing that the drainage tube can be removed with safety at a much earlier date than has been our usual practice. I should be at present not disposed to remove it as early as after the first or second day; for his cases show that this might necessitate a re-opening of the chest once, or even twice, which in private practice would be very prejudicial. It might be safe to withdraw it after a week. If subsequent experience should establish the safety of this proceeding, the operation might be simplified by omitting the resection of a piece of rib, and the introducing the drainage tube by an incision in the intercostal space. My practice for many years has been to resect. But if the tube can be withdrawn so early, it would not be squeezed and obstructed by the falling together of the ribs, due to the retraction of the chest walls; and there would be no danger of costal necrosis from long-continued pressure of the tube, and an intercostal incision might suffice.

Dr. POULTON had listened with much pleasure to the instructive papers read by Drs. Hayward and Borthwick. He was inclined to favour the view that empyema

was not necessarily empyema from the first, as he saw no reason why a primary sanguineous or serous effusion might not be invaded by pus forming organisms and become purulent. A pleural effusion might undoubtedly be purulent from its beginning; but that was no reason why other effusions might not become purulent. In opening the chest for empyema, he was in the habit of excising a portion of rib, as exploration of the cavity and evacuation of its contents were so facilitated. There was but little risk of rib caries, and the continuity of the bone was usually restored.

Dr. POULTON, in reply to Dr. Swift's question as to why he did not operate earlier, referred to the reasons stated, and quoted Fagge and Pye Smith's "Principles and Practice of Medicine," page 1,037, where with reference to exploration it is stated: "We may safely delay with a patient in a hospital ward watched day and night." "If percussion show, the quantity of fluid is moderate it is, as a rule, advisable to wait; unless it begins to diminish in a fortnight no further postponement of tapping is desirable."

Dr. HAYWARD thanked members for their valuable criticisms of his paper. He was pleased to find that the opinion that Dr. Verco and he himself had expressed so long ago as 1891, viz., that empyema was not a development of pleurisy with serous effusion, now met with a good deal of support. At that meeting Dr. Verco gave it as his opinion that empyema was a disease sui generis, and that pus was formed *ab initio*, and he evidently still held the same opinion. He (the speaker) had come to the conclusion that the pus was not formed *ab initio*, but that it was chiefly due to the liquefaction of fibrinous masses. He was surprised to hear from the president that in taking this view he was in such excellent company, for he had no idea that Drs. Barlow and Angel Money had arrived at the same conclusion many years ago. He could not agree with the president that this explanation had been generally adopted for many years. At any rate, Dr. Verco had not adopted it, for that evening he had stated that it did not commend itself to him inasmuch as in pneumonia the fibrin and cells in the vesicles become liquefied and absorbed without purulent expectoration. But the analogy was imperfect. In the one case there were large masses of fibrin enclosed in a cavity, the walls of which have not great powers of absorption; in the other there were large numbers of small masses of fibrin closely surrounded with a meshwork of vessels fully capable of absorbing material in the gradual process of liquefaction. There was no reason to think that when the amount of plastic pleural exudation was small absorption did not take place. Probably such was the usual course, otherwise cases of empyema would be more frequent. It was probable that only when the exudation was very extensive, or the absorption powers of the pleura debilitated, did liquefaction to the extent found in empyemata occur. The pus was always of a more or less watery character; it could never be described as "laudable." The explanation he would offer as to the presence of the large quantity of pus that was sometimes evacuated was that this fluid acted as an irritant to the pleura and caused a free secretion, not necessarily purulent in character. After the chest has been well washed out in these cases there was always a free secretion of serous fluid for the first twenty-four hours. Dr. Verco said that it was going too far to assert that all cases of this form of empyema were associated with acute pneumonia. Cases might not always present the classical physical signs of this disease, but he ventured to think that if the history of them was carefully gone into, the classical symptoms would be found to have been present at the

onset. Cases of pneumonia affecting either an internal or basal lobe were undoubtedly met with in which the physical signs never reached the surface. It seemed to him more than improbable that pneumococci of sufficient virulence to be able to set up an empyema could traverse a lung without setting up trouble *en route*. The question as to the necessity of resecting a rib had been freely discussed. He looked upon the proceeding as essential. By no other method could irrigation be effective. Indeed he was inclined to suggest the advisability of a counter opening. As to when the drainage tube should be removed, the object should be to close the wound as soon as possible; at the time of operation for choice. If it was allowed to remain for six days it would probably have to remain for a much longer period. He considered the suggestion of Dr. Borthwick, that a germicidal solution should be used to wash out the chest, a valuable one.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MINUTES OF MEETING OF COUNCIL HELD AT WELLINGTON, OCTOBER 22ND, 1898.

Present.—Dr. Fell (President, and representative for Auckland), Dr. Perkins (representative for Wellington), Dr. Mason (Parliamentary Secretary and representative for Canterbury), and Dr. Graham Campbell (General Secretary and representative for Canterbury). An apology was received on behalf of Dr. Fyfe (representative for Dunedin), who was unable to attend on account of ill-health.

Minutes.—The minutes of last meeting were read and confirmed.

CORRESPONDENCE.

From the British Medical Association (London), requesting the Branch to appoint delegates to represent the colony on the London Council.

Resolved.—"That the Secretary reply that in consequence of notice not having been received in time, it is impossible to arrange for representation this year, but that an effort will be made to do so next year."

From Dr. Pabst (Auckland), notifying the Council that the 4th of January next had been selected for opening the annual meeting in Auckland, and setting forth the advantages attending that date.

From the General Medical Council, with reference to the practice of advertising adopted by certain medical practitioners.

Ordered.—That the letter do lie on the table.

From the manager of the *Australasian Medical Gazette*, notifying rates of discount to be allowed in future to the various branches.

From the Victorian Branch, urging reform with regard to unattached membership, and pointing out that medical practitioners can get into the Association without reference to the local branches.

Dr. MASON moved—"That a reply be forwarded to the Victorian Branch heartily endorsing their action in the matter, and agreeing to second their efforts in every way possible."

Dr. G. CAMPBELL seconded the motion. He thought the proposal was one deserving hearty support. At present a man in Wellington unable to obtain admission to the Branch could send his papers Home and be elected a member of the Association.

Motion agreed to.

From the Intercolonial Medical Congress, Brisbane, enclosing resolutions passed at a meeting of the executive committee, reserving to itself the right to refrain

from inviting to membership any legally qualified practitioner whom it may consider ineligible, and requesting the secretaries of Medical Societies to forward a list of ineligible members.

Resolved.—"That the General Secretary reply that the Council does not see its way to accede to the request in view of possible legal consequences."

From Dr. Irvine (Christchurch), asking that a copy of the shorthand notes of proceedings at annual meetings be forwarded as soon as possible for the use of himself and members of the Benevolent and Defence Funds.

Resolved.—"That the request be granted, but that the application be made annually."

Accounts.—Accounts amounting to £7 14s. 6d. were passed for payment.

New Members.—The following were admitted to membership of the Branch:—E. D. Aubin (Auckland), H. O. Faulk (Wellington), D. Gault (Pahiatua), J. C. Hood (Auckland), H. Hunter (Ashburton), T. G. H. Hall (Whangarei), L. S. Hughes (Gisborne), A. O. Knight (Auckland), B. Locking (Napier), W. T. Tytheredge (Marton).

Annual Report and Balance-sheet.—The General Secretary submitted draft copy of annual report and balance-sheet. Adopted.

Auditors.—In consequence of the illness of Dr. Thomas it was decided to ask Dr. Jennings, of Christchurch, to act as one of the auditors.

Library.—The General Secretary stated that 226 volumes of medical works had been received from the library of the British Medical Association, London, and he proposed that the books be distributed amongst the various sections in proportion to membership, on payment of freight and cost of delivery. Agreed to.

Condolence.—The Secretary was instructed to forward letters of condolence to the widows of Drs. Hacon and Leahy, late members of the Branch.

Parliamentary Secretary's Report.—The Parliamentary Secretary (Dr. Mason) reported that, in accordance with a resolution passed at last meeting of the Council, he had communicated with the Government respecting—(1) The establishment of a Bacteriological Laboratory for the colony; (2) proposed alteration in the present form of death certificates issued by Registrar-General; (3) the supply of free vaccine and sera. On the question of vaccination he had suggested that before adopting any course similar to that taken at Home with reference to a conscience clause in the Vaccination Act, the Government should appoint an expert as well as a lay committee to discuss the matter. With regard to pure calf lymph, that was already supplied free of cost on application to Dr. Wilford, of Patea. He had also written to the Government in regard to a concession in railway fares for members attending the annual meeting at Auckland in January next, and had received a reply from the General Manager of Railways stating that the department could not see its way to issue special excursion tickets to members of the Branch, but that the issue of cheap tickets would commence about the 20th December, and continue up to the 4th January, being available for return up to about the beginning of February. Arrangements, however, would be made to issue a free pass to each member of the medical profession, and his wife when so accompanied, from Auckland to the Thermal Springs and back, on production to the District Railway Traffic Manager, Auckland, of a certificate signed by himself (Dr. Mason). The term "Thermal Springs" was subsequently explained to include Te Aroha and Rotorua, and the passes would be from Auckland to Te Aroha and Rotorua and return.

With regard to the death certificate, the Government had replied that they were quite willing to accept the suggestion that medical men should use the words "as I am informed" therein. Having received the usual official reply in reference to the proposed Bacteriological Laboratory, he had consulted with Mr. Gilruth, Government Veterinary, and had finally that morning (October 22), in company with the General Secretary (Dr. Campbell), waited on the Minister of Lands and placed the matter fully before him. The Hon. the Minister, in reply, said that the Government had already discussed the matter, and he thought they would be able to grant all that the deputation had asked for. He (Dr. Mason) considered the result of the interview very gratifying. There would probably be a central station for the supply of culture media, and anti-toxins would be imported in bulk. Specimens for examination and report by Mr. Gilruth could be forwarded to the laboratory, and thus facilities would be offered to the medical profession which would enable members to keep pace with modern requirements. He desired to acknowledge the very valuable services rendered to him by Mr. George Fisher, M.H.R., in connection with the Medical Registration Bill, which had been before the House, and in other directions.

Dr. CAMPBELL said that, with regard to the annual meeting, he had communicated with the Union Steamship Co. with a view to obtaining concessions in the steamer fares to Auckland, and the company had consented to a reduction of 10 per cent. on the ordinary fare if any number of members were likely to travel.

This concluded the business.

ANNUAL MEETING OF THE NEW ZEALAND BRANCH.

Dr. Pabst, of Auckland, secretary for the annual meeting of the New Zealand Branch, has notified the various sections as follows:—"The annual meeting of the New Zealand Branch of the British Medical Association will be held in Auckland during the first week of January, 1899. The members of the Auckland Section are determined to do everything to make the meeting a success, and a committee has been specially set apart to look after the interests of the visitors, of whom we hope to see a goodly number. During the week of the meeting the Auckland Exhibition will be in full swing, and the Auckland Racing Club will be holding the Summer Meeting. A trip to the hot lakes (Rotorua) is also being arranged for. There will be a general discussion on 'Anæsthetics' in addition to the usual papers, &c."

OTAGO SECTION.

ABSTRACT OF PROCEEDINGS.

Meeting, August 31st, 1898. In answer to a letter from the Otago Pharmaceutical Society, the Section resolved,—"That January 1st, 1899, would be a suitable date on which to begin prescribing according to the new pharmacopœia of 1898."

Dr. MACPHERSON read some interesting and amusing notes on an old "Dispensatory," dated 1733, and edited by James Allen, M.D.

Dr. BARNETT read a paper on "Hydronephrosis." In illustration of the subject he described two cases recently under his care. The first was a young man, who, thirteen years previously, had been struck a heavy blow in the left loin, and who suffered more or less from pain in that region ever since. Occasionally there was hæmaturia, and sometimes vomiting attacks. A large hydronephrotic kidney, with the cortex reduced to a mere fibrous capsule, was exposed and removed. The ureter was distinctly strictured at its outlet from the renal pelvis (specimen shown). The patient made a speedy and complete recovery. The

second case was an elderly man of confirmed alcoholic tendency, who, after a severe attack of bronchitis, developed high fever with rigors and intense pain in the region of the left loin, where patient thought an enlarged spleen had been present for thirty years. The enlarged spleen on examination proved to be an enormously distended kidney, the contained fluid being intensely foetid, and swarming with actively-moving bacteria. The patient's urine also exhibited the same kind of organism. This patient made an excellent recovery after nephrectomy, although in this case the cyst wall was so adherent and friable that it had to be removed piecemeal.

Dr. Barnett then discussed the etiology and pathology and surgical treatment of hydronephrosis in general, after which Drs. Colquhoun and Roberts discussed various points of interest in the paper.

Meeting, September 28th, 1898. After the usual routine business and the consideration of some unimportant letters. Dr. CLOSS read a paper on a case of severe brain injury. The patient, a boy of fifteen, fell from a horse on his head, sustaining a compound comminuted fracture. On admission to the Dunedin Hospital a month after the accident in a paralysed, semi-conscious state, there was observed over the right side of the head a large tense fluctuating swelling. This was opened, and was found to contain lymph, blood and brain matter. On removing this the skull and brain were seen to be extensively damaged in the Rolandic area. Portions of loose bone were removed, a depressed fragment raised, and old blood clot and broken down brain-tissue sponged away. By seven days after the operation the patient was wonderfully improved, and could give a coherent account of how the accident happened. Two months afterwards he could walk, and his sight, previously lost, was returning.

The case gave rise to an interesting discussion on the complications and prognosis of severe head injuries.

Meeting, October 26th, 1898. A satisfactory balance-sheet was presented, and approved.

A donation of £3 was granted to the Hospital trustees for the use of the meeting room, and the usual donation of £1 was granted to the Hospital porter.

Drs. Todd, of Invercargill, and Logan, of Dunedin, were recommended for membership.

A letter was read from Dr. Pabst, of Auckland, Secretary for the Annual Meeting of the New Zealand Branch, stating that the meeting would commence on the 4th January, and enumerating a goodly list of attractions for the week.

The following office-bearers, nominated at the previous meeting, were elected for the ensuing year:—President, Dr. Barnett; Vice-Presidents, Dr. Closs and Dr. Fulton; Secretary, Treasurer, and Local Editor, Dr. McKellar; Standing Committee, Drs. Hocken, Roberts, and Batchelor; Library Committee, Drs. Barnett, Colquhoun, Smith, and the House Surgeons.

The case of an unregistered practitioner in Dunedin, about whose qualifications there seemed to be some doubt, was considered, and it was decided to refer the matter to the local representatives of the Medical Defence Union.

Dr. MACPHERSON then read a paper on "Grave's Disease," giving an interesting and particular account of two fatal cases in which all the recognised remedies utterly failed to stay the onward progress of the disease.

Drs. Colquhoun, Barnett, Fulton, Batchelor, and Logan discussed the paper at some length. The general opinion in regard to drug treatment was that opium and ergot in large doses give the best results.

BALLARAT DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE quarterly meeting of the Branch was held at Ballarat on Monday, 24th October, at 8.30 p.m. Present: The President (Dr. Robert Scott), Drs. Palmer, Affleck, Scott, Jordan, Cussen, Gutheil, Usher, Gardiner, Champion, Richards, Davies, Pinnock, and Mitchell (hon. sec.).

Apologies were received from Drs. Donaldson, Morrison, Wilson, Beattie Smith, and Salmon.

Accounts amounting to £5 6s. 6d. were passed for payment.

The HON. SECRETARY reported renewal of fixed deposit of £70 and the payment of £9 9s. 2d. interest into current account.

Resignation.—The resignation of Dr. John Tremearne was accepted with regret.

Correspondence was received from the Medical Defence Association of Victoria, asking this Branch to appoint a delegate to an Intercolonial Conference. The President was unanimously selected to attend and represent the Branch.

Drs. Palmer and Beattie Smith invited the members of the Branch to visit Ararat on November 9th. A large number of members accepted the invitation.

Dr. GUTHEIL read a most instructive paper on the "New British Pharmacopœia," which was greatly appreciated. (See below.)

Drs. PALMER and AFFLECK SCOTT discussed the paper.

Dr. E. CHAMPION read a paper on a case of "Acute Infective Epiphysitis," to be reported later.

An interesting discussion followed, in which Drs. Palmer, Cussen, Usher, Gutheil, and Mitchell took part.

EXHIBITS.

Dr. MITCHELL showed a piece of mundic which he had removed from an arm in which it had been embedded for 49 years.

Dr. GARDINER showed several skiagraphs—

- (1) Fracture of humerus before and after setting.
- (2) Compound fracture of humerus close to elbow joint, before and after setting.
- (3) Dislocation of lower epiphysis of tibia.

Also specimen of enlarged prostate with greatly hypertrophied bladder, showing two sacculated herniæ of the mucous coat through the muscular fibres.

The by-laws were ordered to be printed and supplied to the members before the next meeting.

Nomination for Membership.—Arthur Gerald McGowan, M.B., et Ch.B., Ballarat Hospital, proposed by Dr. Gardiner.

At the conclusion of the meeting the members adjourned to a supper in honour of Dr. Champion's approaching marriage. The PRESIDENT (Dr. Scott), in proposing the health of the guest, took the opportunity of making a handsome presentation to Dr. Champion, on behalf of the Ballarat members of the Branch.

THE NEW BRITISH PHARMACOPŒIA.

By E. GUTHEIL, M.B., CH.B.

READ AT THE QUARTERLY MEETING OF THE BALLARAT DISTRICT BRANCH OF THE BRITISH MEDICAL ASSOCIATION, OCTOBER 24TH, 1898.

AT last, after patient waiting, we have had the fourth British Pharmacopœia placed at our disposal, and I think all will agree that it was high time we had a new

"guide, philosopher, and friend." During the last ten years there have been as many improvements in the form and manufacture of old remedies, as also the discovery of new ones, as in any thirty or fifty consecutive years previously; and lately, prescriptions were very frequently showing the use of drugs which were never thought of when the 1885 British Pharmacopœia was published. All this showed the trend of modern thought, and it has now been ineffaceably recorded for the annals of future time by the printing of this 1898 British Pharmacopœia. Yet we should not have been disappointed if we had had to wait a year or two more for its appearance, if, by so doing, vital objects would have been gained. However, the work has been published, and it is my object this evening to lay before you the salient features of its alterations and its new matter.

A pharmacopœia may be shortly defined as "a register of approved remedies and preparations, and a key by which the pharmacist can interpret prescriptions."

In studying the history of medicine, we find that it is to the Arabs, from the ninth to the twelfth centuries, A.D., that we owe the first thoughts of a pharmacopœia; although they in their turn obtained the essence of their medical knowledge from the Greek (1398 B.C. to about 1100 A.D.) and Roman (23 to 230 A.D.) schools, and especially from Hippocrates (460 to 360 (?) B.C.) and Galen (131 to 200 A.D.).

The first pharmacopœia published under authority was the "Dispensatorium Pharmacorum Omnium" of Nuremberg, written by Valerius Cordus, and printed in the year 1524 A.D. Valerius Cordus, then a student, showed to the Nuremberg physicians a collection of medical recipes, which he had selected from the best works extant. The physicians were so struck with its value that they urged him to print it for the benefit of the apothecaries, and it was then published under the sanction of the city council or senatus. The medical works chiefly in use before this time, and, indeed, even long afterwards, were:—

1. The "Antidotarium" of Mesué (846 A.D.), an Arabian.
2. A "Treatise on Simple and Compound Medicines," by Serapion (900 to 1066 (?) A.D.), also an Arabian.
3. The "Canon," and other works of Avicenna (978 to 1036 A.D.), the highest light of Arabian medicine.
4. "Synonemes" and "Quid Pro Quo, or Substitutions," by Simon Januensis.
5. "Liber Servitoris," by Bulchasin ben Aberazerim, which treats of the preparation of plants and animals, and the chemical remedies then in use.
6. The "Antidotarium" of Nicolaus Prepositus (1160 to 1223 A.D.) of Salerno. This was found in a complete and in an abridged form, and described a great number of medicines, principally taken from the Arabs.

Of all these again the works of Mesué and Nicolaus seem to have been the most popular, and those from which future works culled most of their information.

After this dispensatory of Cordus followed one on similar lines in Augsburg in 1538, and was called the Pharmacopœia Augustana in 1601; and from this date pharmacopœias began to spring up slowly in most of the principal countries of Europe, as is seen by the subjoined table:—

LIST OF COUNTRIES SHOWING WHEN PHARMACOPŒIAS WERE INTRODUCED, AND THE NAMES OF THEIR RESPECTIVE WORKS.

Country.	Date.	Title.
Austria	1700?	Pharmacopœia Austriaca
Britain	1618	Pharmacopœia of the London College of Physicians
Denmark & Norway ..	1772	Pharmacopœia Danica
Finland	1819	Pharmacopœia Finnica
France	1639	Codex
Germany	1668	Pharmacopœia Borussica
Greece	1837	Pharmacopœia Græca
Holland & Belgium ..	1636	Pharmacopœia v. Amsterdam
Italy	1629	Pharmacopœia Messenensis
Japan	1887	Pharmacopœia Japonica
Peru	1681	Pharmacopœia Peruvica
Poland	1817	Pharmacopœia Regni Polonici
Portugal	1711	Pharmacopœia Lusitana
Russia	778	Pharmacopœia Rossica
Spain	1751	Pharmacopœia Valentianensis
Sweden	1768	Pharmacopœia Holmiensis Galenico-Chymica
Switzerland	1684	Pharmacopœia Regia
U.S. of America	1820	Pharmacopœia of the U.S. of America
Venezuela	1898	Pharmacopœia Venezuelana

Many towns, especially in Germany, Holland, Italy, Spain, and Portugal, had pharmacopœias of their own as well, and thus complicated dispensing the more. The title "Pharmacopœia," however, was first distinctly given to a work published at Basel in 1561 by Dr. A. Foes; and it does not appear to have come into general use until the beginning of the seventeenth century.

Confining our remarks now to Great Britain, we find that England, Scotland, and Ireland had each, until 1864, a pharmacopœia for itself. England's book was the "London Pharmacopœia," or really the "Pharmacopœia of the London College of Physicians," whose first issue was in May, 1618, but was so imperfect that it had to be reprinted in the following December. Between that year and 1864 there were thirty-two editions all more or less different from one another, and each forming an important account of the history and progress of pharmacy and therapeutics during these centuries. The first issue was founded on the works of Mesuë and Nicolaus, but the nature of the drugs even in many of the later editions was curious, and included among others:—Earthworms, snails, wood-lice, frogs, toads, puppy-dogs, foxes, skulls of men who had been hanged, cats' blood, the urine and excrements of many animals and even man, calculi, and the moss grown on the human skull. Crabs' eyes, pearls, oyster-shells, and corals were supposed to have different therapeutic qualities, and electuaries were ordered containing fifty, sixty-two, and in one instance, viz., "Mathiolus, his great antidote against poisons and pestilence," 124 ingredients. This polypharmacy was for a long time in vogue, and even now may occasionally be seen; but the official height of polypharmacy occurring in the 1898 British Pharmacopœia is seen in *Confectio Sennæ* with its nine ingredients, *Tinct. chloroform. et Morphin.* Comp. being a close second with eight.

The "Edinburgh Pharmacopœia" was first published in 1699, and had eighteen editions up to 1864; while in Ireland there were only three pharmacopœias—one in 1807, the next in 1826, and the last in 1850.

Now, though similar preparations occurred in these various pharmacopœias (e.g., dilute hydrocyanic acid, and solution of hydrochlorate of morphia), their strengths were different, and hence dangerous results could occur. It was therefore enacted by the Medical Act of 1858, passed in Great Britain, that a pharmacopœia, called the "British Pharmacopœia," should be published, and the General Council of Medical Education and Registration of the United Kingdom should have the exclusive right to do this, as well as alter,

amend, or re-publish it as often as they deemed necessary. This work therefore became authoritative all over Great Britain, and superseded the former London, Edinburgh, and Dublin pharmacopœias. Even the British colonies, situated in all sorts of climates, and with their own specially local diseases, accepted it as their basis, though at first these countries were not much taken into consideration. But it was left for this 1898 British Pharmacopœia to have a special heading in the appendix containing "Alternative preparations sanctioned for use in India and the colonies." The first British Pharmacopœia came out in 1864, but was so disappointing that it had to be amended in 1867. The next was issued in 1885, and this year we have the one I am to speak of to-night. It is to be hoped that in the near future we may have a still further condensation of pharmacopœias, and thus pave the way to an "International Pharmacopœia," to show the union of the medical brotherhood all the world over.

Having now given you a short history of the work, I come to the main part of my paper—the 1898 "British Pharmacopœia." Taking this book, then, generally, we first of all notice that the former 930 odd official substances and preparations have been reduced to about 830; and this includes the addition of eighty new ones and the omission of 188 old ones, these latter being struck off either because they are of very little clinical value, or, as in the cases of linseed poultice, chalk, milk, white of egg, raisins, and a few others, because they require no special definition, though they are still largely used medicinally. We then also meet with the phrase "raisins of commerce," or "glucose of commerce," which indicates that that particular article is always found pure enough for medicinal purposes, and so requires no further description. Hence, with all this reduction of material, there has also been a corresponding reduction of about eighty pages of printed matter, but that has again been utilised in forming several more or less handy appendices. In this way the new edition is practically of the same size as that of the 1885 publication.

Most pharmacopœias are now based upon the following plan:—

1. Official name and synonym.
2. Name of source.
3. Preparation.
4. Characters, tests, and strength.
5. Dose.
6. Official preparations into which it enters.

We will, therefore, now consider the main body of our book more in detail, but without as yet taking any particular drug into consideration; and if we follow on the lines of its general plan, the following changes will be noticed:—

1. The very much more uniform nomenclature of drugs, as well as the more scientific manner of naming them, especially from a chemical point of view.
2. The omission of many of the obsolete synonyms.
3. With regard to all the inorganic salts, their English names have been slightly altered by an inversion of terms. Thus the former English equivalent for *Plumbi Carbonas* was "carbonate of lead," but now it is "lead carbonate."
4. The very careful chemical definition of a substance where so required.
5. The omission of all the bracketed botanical and zoological synonyms so often found in the previous edition, as describing the source of a drug.
6. The absence of the methods of preparation of so many chemical substances, which the preface says is done because "the literature of chemistry and chemical

technology is now so accessible as to render such description to some extent superfluous."

7. The addition of the metric weights and measures alongside of the ordinary imperial ones where galenical preparations occur. This, no doubt, is done as an incentive to the future adoption of the metric system. But I am afraid very few pharmacists will glance their eyes over this part of the work, and I am sure not a single medical man; for all the doses are only given according to the imperial system. Had these latter been also similarly "metricised," if I might use the word, there would certainly have been a far greater inducement for the pharmacist to work by this method; but as it is now it is certainly "a beginning at the wrong end of the stick." The more is this the pity, since all the continental pharmacopœias, and even those of the United States and Japan, only employ the metric system.

8. The far fuller and more useful physical and chemical characters of drugs, especially as influencing their purity and incompatibility.

9. The addition of the microscopical characters to many of the botanical drugs. This is a very important innovation, and especially valuable to pharmacists.

10. The very numerous changes of dosage, particularly among the galenical preparations, and owing to alterations in their strength. This, however, will be welcome, because the object aimed at has been to lessen the former many varieties of dosage. Whole groups, therefore, like the extracts and tinctures, show only two or three variations each, thus simplifying their remembrance greatly.

11. The absence under the descriptions of the various drugs of the names of the official galenical preparations into which they enter. In the preface it says, "these are now given in all important cases in the Index," and further, "Some pains have been taken to increase the usefulness of the index." But I think you will agree that this so-called "increase of usefulness" is a very doubtful quantity, for a more incomplete and clumsy system of indexing I cannot imagine. More will be said of this, however, when I come to treat of the index.

To examine the British Pharmacopœia now still more in detail, but not yet coming to individual drugs, we have to consider the groups of the various galenical preparations. The following table shows the changes that have taken place:—

Group.	Total Number in		Altered in strength or composition.	Preparations.		Remarks.
	Old.	New.		Omitted.	Added.	
Aceta	4	3	1	1	—	Vinegar (Acetum) omitted
Aque	15	15	6	—	—	
Cataplasmata	6	—	—	6	—	
Charta	2	1	—	1	—	Charta epispastica omitted
Collodia	3	3	1	—	—	
Confectiones	8	4	1	4	—	Those of pepper, roses, senna, and sulphur remaining
Decoctiones	12	3	2	10	—	Those of aloes comp., granat. cortic., and hamatox. remaining
Emplastra	15	12	6	5	—	Those of iron, galbanum, and brown soap omitted
Emmata	5	—	—	—	—	
Essentia	2	—	—	2	—	Both now included under the spiritus, and made only half their former strength
Extracta	50	39	9	17	5	That of strophanthus, and the liquid ones of belladonna, ipecac., jaborand., and nuc. vom. added
Glycerina	8	9	4	1	2	That of gallic acid omitted; and those of boric acid and pepsin added
Infusiones	28	22	6	7	1	That of scoparium added; its decoction being omitted.
Injectiones Hypodermicae	3	4	3	—	1	That of cocaine added
Lamellae	3	4	—	—	1	That of homatropine added
Linimenta	16	15	6	1	—	That of iodine omitted; this being now termed liq. iodi fortis
Liquores	51	53	13	15	18	Among the omitted are those of ferri dialysat., iodi, morphin., bimeconat., and magnesi. citrat.
Lotiones	2	2	2	—	—	Yellow wash now 2 grs.: loz.; and black wash containing now also glycerin. and mucil. tragacanth
Mellita	1	1	—	—	—	
Mistura	1	9	7	2	—	Those of ferri aromat. and scammon. omitted
Mucilagines	3	2	—	1	—	That of starch omitted
Oleata	2	—	—	2	—	
Oxymellita	2	2	—	—	—	
Pilula	22	20	13	3	1	That of quinin. sulph. added; and those of conii comp., ferri carb., and ferri iodid. omitted
Pulveres	16	16	2	—	—	The alteration is the omission of saffron from pulv. oret. aromat., and therefore pulv. oret. aromat. o. opio.
Spiritus	18	18	8	1	1	That of anise added, and sps. tenulor omitted
Succi	5	6	—	—	1	That of lemon added
Suppositoria	9	7	2	4	2	Those of carbolic acid and belladonna added; and that of hydrarg. and the three with soap omitted
Syrupi	18	22	4	3	7	Those of ferri subchlorid., mori, and papaveris omitted
Tabellae	1	1	1	—	—	Their strength is unaltered, but their weight is increased from 2½ to 5 grs. each
Tinctura	75	57	45	1	3	Those of ergot. ammoniat., pruni virginian., and quillaie added
Trochisci	13	17	12	1	5	That of opium omitted; and all the bases more or less altered
Unguenta	45	44	28	7	6	Those of antimon. tartarat., calamin., elemi, potass. sulphurat., terebinth., and ung. simpl. omitted
Vapores	6	—	—	6	—	
Vina	11	8	2	3	—	Those of aloes, opium, and rheum omitted

1. It will be noticed that the cataplasmata, enemata, essentia, oleata, and vapores are officially things of the past; so that this list is at once reduced from thirty-five to thirty forms of administrations, no new ones having been added.

2. In only seven instances have the individual members of a group increased in number, all the others having been reduced, or remained the same.

3. The liquors have undergone great changes. In the first place, all the former 1% solutions are now altered to a strength of 1 gr. in 110 m (= 1 grm. in 100 cc.), and altogether there are eleven such to be noted, viz., liqs. arsenical., arsenic., hydrochloric., arsen. et hydrarg. iodid., atrop. sulphat., morph. acetat., morph. hydrochlorid., morph. tartarat., potass. permangan., sod. arsenat., strychn. hydrochlorid., and trinitrin. It might be stated that in the 1867 British Pharmacopœia many of these had the strength of 1 in 109, so it is to be hoped that these so-called 1% solutions have at last received their final re-grading. Secondly, there is the inclusion here of ten "concentrated solutions," which are intended, when diluted with water, to take the place of their corresponding infusions and decoction. They are liqs. concentrati. calumb., chirett., cuspar., kramer., quass., rhei., sars. comp., seneg., senn., and serpentar. Are the corresponding official infusions and decoction, therefore, to be considered inferior in action? And, if so, why are they still retained?

4. The tinctures have been greatly simplified with regard to their doses. Of the stronger ones nineteen now have a dose of from 5 to 15 m, while forty-five of the milder ones range from $\frac{1}{2}$ to 1 dr. Tinct. iodi is the only one with a dosage of from 2 to 5 m; whilst those of arnica and pyrethrum have no dosage mentioned under them. We need not, therefore, have to tax our memories so much in the future, and could only wish that this simplicity occurred in all the galenical groups.

Many other interesting particulars could be worked out from the foregoing table, but, as time is short, I must come to the last part of this paper, viz., short notes on various drugs and preparations that may be of interest.

1. It is evidently intended that the terms antifebrin, antipyrin, and saccharin shall gradually disappear, and be replaced by *acetanilide*, *phenazone*, and *gluside*, which are chemically more correct. The former had purely clinical meanings. The naming of drugs will always be a trouble to us if the manufacturers of new ones will insist on giving their inventions incorrect, though "taking," names.

2. Among the whole group of *acida*, the main changes are—a general lowering of a few m or grs. in their dosage, those of the dilute mineral acids being now all 5 to 20 m; and secondly, the omission of *acd. meconic.*, and *acd. lactic. dil.*

3. *Aconite* leaves are omitted; whilst the root is to be gathered in autumn and dried. The official aconitine is now a definite crystalline chemical body, the former, which was amorphous, being composed of several alkaloids.

4. Ethylic alcohol, now termed *absolute alcohol*, should contain no more than 1% by weight of water. But, besides this, there are five other strengths given, more or less required for various galenical preparations; they are 90% (rectified spirit), 70, 60, 45, and 20%. The obsolete *spa. tenuior* had 57%.

5. The former alkaloidal *hydrochlorates* are now all far more correctly called *hydrochlorides*; thus *apomorphinæ hydrochloridum* and *strychninæ hydrochloridum*.

6. In the former British Pharmacopœia the terms *chrysarobin*, *araroba*, and *goa powder* were wrongly considered as synonyms. This is now corrected, and we have the amorphous *araroba*, or *goa powder*, as the crude *chrysarobin*, of which it should contain at least 50%, and also the crystalline *chrysarobin* itself.

7. Of the *orange*, the fresh and dried peels are only official; the fruit itself is omitted. But the flowers, as before, are used for *aq. aurant. flor.*, though not described. Tinct. aurant. is now prepared from the fresh peel, and hence the tinct. aurant. recent. is omitted.

8. *Beberine sulphate*, and its source the nectandra bark, as also *bael fruit* and its preparation, have disappeared.

9. Besides the dried root, only the fresh leaves of *belladonna* are now official. There are also three extracts—an alcoholic (one-third the strength of the former one) and a liquid one from the root, and a green extract from the leaves.

10. *Benzol* has been introduced to prepare *chart. sinap.* and *liq. caoutchouc.*

11. Of the *Bismuth* salts the citrate, and the bismuth. et ammon. = citras have been omitted, though the liquid of the latter is retained. Bismuth. salicylas is added; and the lozenge is made with the carbonate instead of the subnitrate.

12. Only the smallest of the former three varieties of *buchu* leaves is now official—viz., those from *Barosma betulina*. This variety contains the largest amount of volatile oil, and in fact is the only one obtainable commercially.

13. From *chalk* by chemical action is now prepared a *syr. calcii lactophosphat.*, which should prove useful. Perhaps by an oversight the chemical formula of calcium phosphate has been omitted.

14. Instead of the former *gutta-percha* we have *caoutchouc*, the india-rubber or para-rubber, obtained from *Hevea Brasiliensis* (N.O. Euphorbiaceæ). The liq. caoutchouc obtained from it is, I believe, a more satisfactory preparation than the former liq. gutta-percha, as it is more adherent.

15. *Carbon bisulphide* and *kaolin* are now official apparently only because they are contained in *pil. phosphori*.

16. There must surely be a misprint in one or other of the words, "*caryophyllum*" and "*cloves*." One is singular, and the other plural. In the last British Pharmacopœia it was correct, but from the general description following it seems that "*caryophylla*" was intended.

17. *Bhamni purshiani* cortex is to be known in future as *cassara sagrada*, and an aromatic syrup has been introduced, but one will miss the characteristic aniseed flavour found in the present commercial article. *Rhamnus frangula* is expunged because it did not prove so satisfactory a drug.

18. The sp. gr. of the new official *chloroform* is to be from 1.490 to 1.495, and not 1.497 as before. The new form is evidently more stable. Careful tests have also been added for proving the presence or absence of any of its decomposition products, even presuming the chloroform were pure originally. Tinct. chlorof. comp. is omitted, and *aq. chlorof.* is half its former strength.

19. *Coca* is now termed *coca folia*, and cocaine itself is official, being used for *ung. cocainæ*. It is a pity, however, that the solution of the hydrochloride as it occurred in the 1890 additions was not left as such instead of calling it a hypodermic injection; for cocaine is used far more frequently as liq. cocain. hydrochlorid. than as inject. cocain. hypoderm.

20. *Cocaine phosphas*, the most soluble salt of this alkaloid is added, and from it is prepared a *syr.*

21. *Cresate* is to be spelt with an "o" in the second syllable; so also the words "gelatin" and "glycerin" drop their final "e."

22. The former ergotin, or Bonjean's ergotin, is now to be termed, and more correctly so, *extract. ergotæ*. The tinct. is also an ammoniated one, because the addition of ammonia makes a more reliable preparation.

23. The iron salts have been reduced from twelve to ten, the peroxide and granulated sulphate being omitted; whilst a new preparation, though rather old in practice—viz., Easton's syrup, is added.

24. A 2½ to 3 % solution of *ethyl nitrite* (liq. ethyl nitrit.) has been introduced, to be used if desired instead of sps. ether. nitros., because it is believed that this preparation owes its activity to ethyl nitrite.

25. A liq. *hydrogen. peroxid*i of from 9 to 11 % strength has also been added, and should be useful.

26. The former pil. *asafetid. comp.* is now termed *pil. galbani comp.*

27. Only the peeled root of the *liquorice* is to be used in future; for it was found that the cortex contained an acrid principle and tannin.

28. *Pomegranate bark* may now be obtained from the stem or the root. This will be a great saving in the life of the trees, and the products are practically the same.

29. Besides the extract. *hamamelid. liqdm.*, there is also a liq. *hamamelidis*. This latter, I believe, resembles the hazelnut of commerce, as it is colourless, whilst the liquid extract is brown.

30. I am surprised to still see *hemidesmus* and its syrup, and never thought that it was still so much employed.

31. *Oleatum hydrarg.* is omitted, and evidently replaced by the salt *hydrarg. oleas.*, and this is used to prepare ung. *hydrarg. oleat.* An ung. *hydrg. oxid. flav.* is also included.

32. *Hyoscine hydrobromide* and *hyoscyamine sulphate* should prove two useful additions.

33. The old mistake of stating *savanilla* instead of *para rhatany* has now been corrected. *Savanilla rhatany* was never found in commerce. Two *krameria* lozenges are added.

34. Instead of the term linseed meal (*lini farina*), we have now *crushed linseed* (*linum contusum*), and it should only be used when recently prepared. This latter term is more correct, because the former indicated the cake of linseed from which the oil was expressed.

35. *Tinct. lobelia ether.*, as being the better preparation of the former two tinctures, is the only one to remain.

36. The *morphine* suppositories are now to contain ʒgr. instead of the former ʒgr. of the hydrochloride. The hypodermic injection is to be made with the tartrate; whilst the sulphate is completely expunged.

37. *Sps. myristica* is now five times as strong as formerly.

38. *Extract. nuc. vomic.* now contains 5 % of strychnine, whilst the tincture is double its former strength. A liquid extract containing 1ʒgr. strychnine in 110m is added.

39. The *olea*, like most other groups, have been reduced, those of pumilio pine (*ol. pini*) and rose (*otto of rose*) being added, and those of *pinus sylvestris*, *ruta*, *sabina*, and the *ol. myristic. express.* omitted. But from the recent great researches in this group of chemicals the characters and tests as now given form practically a new subject altogether.

40. The *albolene* or *parolein* of commerce is now official as *paraffinum liquidum*.

41. The *pepsin* of the late "British Pharmacopœia" was only required to dissolve fifty times its weight of hard-boiled white of egg, but now it must dissolve 2,500 times its weight. I presume that in each case it is intended that the result of this action shall be peptone, and not merely syntonin and parapeptone. (Vide my paper, "Our Drugs," *Australasian Medical Gazette*, March, 1897.)

42. *Prepared coal tar* with a preparation, the liq. *pice carbonis*, is introduced. This latter is probably on the basis of the liq. *carbonis detergens* of commerce.

43. *Quillaia bark* and a tincture from it have been included also. This drug resembles *senega* only that its action is stronger.

44. Besides the ordinary hydrochloride there is now also an *acid hydrochloride of quinine*. This is added because of its ready solubility, dissolving in its own weight of water.

45. *Tinct. rhei* is now more correctly termed *tinct. rhei comp.* The *vin. rhei* is omitted.

46. Only the petals of *rosa gallica* are to be official. There is also added an ung. *aq. rosæ*, which has no doubt been inserted to replace the expunged ung. *simplex*.

47. After a long and useful career the historical *black draught* has had to undergo a slight change. *Tinct. sennæ* is omitted from it, whilst *sps. ammon. aromat.* has been added, thus giving it a somewhat different flavour.

48. It is curious that purified lard is only termed "adeps," whilst purified suet is still *sebum præparatum*. Suet, I believe, is only official to prepare ung. *hydrarg.*

49. The former *lin. sinap. comp.* has its extr. *mezerei* omitted, and hence is now termed *lin. sinapis*.

50. *Tinct. stramon.* is to be prepared from the leaves, these giving a more satisfactory preparation.

51. Glucose is added as *syr. glucosi*, and is used to prepare nine official pills, replacing the obsolete treacle.

52. Of the many animal extracts now introduced only those of the *thyroid* and *pancreas* have become official, but they are well-tried ones. I might add here, though perhaps a little out of place, that one misses the absence of diphtheria anti-toxin, for it has certainly proved its worth.

53. Among new *flavouring agents* are: *Ol. rosæ, sps. anisi, syr. aromat., syr. glucosi*, and perhaps ung. *aq. rosæ*.

54. Of *drugs that we lose* some are: *Calamine, canella, cetraria, elemi, kamala, lactuca, manna, matico, mastiche, and sabina*.

55. Of *drugs added* besides those mentioned, we have: *Naphthol, salol, Virginian prune bark, and terebene*.

Such, then, are the chief alterations of the new British Pharmacopœia; but I cannot close without giving a short resumé of the appendix and index. The following new headings have been added to the appendix:—

1. Chemical tests for detecting the various basylous and acidulous radicals mentioned in the text, as also for starch. This saves frequent repetition in the text.

2. A short note of how to determine melting-points.

3. The general method for preparing the official tinctures and lozenges; and

4. The alternative preparations sanctioned for use in India and the colonies, according to their prevailing high temperatures.

The index, however, seems to be more or less a failure. It states that "The chief preparations are found under the principal English name of the drug;

but I notice that as soon as a preparation alters its name from that of its main ingredient it is omitted. And then why give it under the English name? Is not the Latin one more used? Thus under "Mercurous Chloride" are given the ointment and compound pill;

but is not black wash a "chief preparation?" This last is omitted. I would suggest the following table, which shows between olive oil and orange peel, opium and its many preparations, as the only way of overcoming the present difficulty.

Name.	Page.	Dose.	Strength.
Olive oil	231	...	...
OPIMUM	235	...	9.5 to 10.5 % of morphine
A. Codeina	83	...	...
1. Apomorphine Hydrochloridum	89	1-20th to 1-10th gr. subcutaneously; 1-10th to 1/2 gr. by mouth	...
a. <i>Injectio Apomorphine Hydrochloridum</i>	161	5 to 10m subcutaneously	1 gr. in 110m (1 grm. in 100 c.c.)
2. Codeina Phosphas	83	1/2 to 2 gra.	...
a. <i>Syrupus Codeinae</i>	325	1/2 to 2 fl. dra.	1/2 gr. in 1 fl. dr.
B. Emplastrum Opii	98	...	10 % of opium
C. Extractum Opii	119	1/2 to 1 gr.	20 % of morphine
1. Extractum Opii Liquidum	120	5 to 30m	1/2 gr. of morphine in 110m (0.75 grm. in 100 c.c.)
D. Morphinae Acetas	217	1/2 to 1/4 gr.	...
1. Liqueur Morphinae Acetatis	193	10 to 60m	1 gr. in 110m (1 grm. in 100 c.c.)
E. Morphinae Hydrochloridum	218	1/2 to 1/4 gr.	...
1. Liqueur Morphinae Hydrochloridum	194	10 to 60m	1 gr. in 110m (1 grm. in 100 c.c.)
2. Suppositoria Morphinae	321	...	1 gr. in each
3. Tinctura Chloroformi et Morphinae Composita	343	5 to 15m	1-11th gr. morph. hydrochlor. in 10m
4. Trochisci Morphinae	367	...	1-36th gr. in each
5. Trochisci Morphinae et Ipecacuanhae	367	...	1-36th gr. of morph. hydrochl. and 1-12th gr. ipecac. in each
F. Morphinae Tartras	219	1/2 to 1/4 gr.	...
1. Injectio Morphinae Hypodermica	163	2 to 5m subcutaneously	5 gra. in 110m (5 grm. in 100 c.c.)
2. Liqueur Morphinae Tartratis	194	10 to 60m	1 gr. in 110m (1 grm. in 100 c.c.)
G. Pilula Plumbi cum Opio	252	2 to 4 gra.	12 1/2 % of opium
H. Pilula Saponis Composita	253	2 to 4 gra.	20 % of opium
K. Pulvis Oretae Aromaticus cum Opio	270	10 to 40 gra.	2 1/2 % of opium
L. Pulvis Ipecacuanhae Compositus	271	5 to 15 gra.	10 % each of opium and ipecacuanha
1. Pilula Ipecacuanhae cum Scilla	251	4 to 8 gra.	5 % each of opium and ipecacuanha
M. Pulvis Kino Compositus	271	5 to 20 gra.	5 % of opium
N. Pulvis Opii Compositus	272	2 to 10 gra.	10 % of opium
O. Suppositoria Plumbi Composita	322	...	1 gr. of opium and 3 gra. of lead acetate in each.
P. Tinctura Opii	356	5 to 15m repeated, and 20 to 30m single dose	1/2 gr. anhydrous morph. in 110m (0.75 grm. in 100 c.c.) = 1 gr. opium in 15m
1. Linimentum Opii	178	...	1 gr. opium in 30m
2. Tinctura Camphorae Composita	340	1/2 to 1 fl. dr.	1/2 gr. opium in 1 fl. dr.
3. Tinctura Opii Ammoniata	358	1/2 to 1 fl. dr.	Nearly 5 gra. of opium in 1 fl. oz.
Q. Unguentum Gallicae cum Opio	373	...	7 1/2 % of opium
Orange Peel Bitter	48, 50	...	...

This table shows all the official preparations, even to the first and second remove. If this, however, cannot be accepted, then the only plan is to revert to the old method of the 1885 edition.

Thus, gentlemen, has our medical Bible, the new British Pharmacopoeia been brought before us, and this is now to exist as our clinical guide for a good many years to come. The changes, as will be seen, are mostly on the improve, and no doubt represent the present ideas of most medical men and pharmacists; but, of course, each one may find some little favourite remedy or preparation altered or removed, to his great annoyance. Of course, such can only be expected. The 1898 British Pharmacopoeia becomes official in Victoria in January next.

Regarding the historical portion of this paper, the following works have been used:—"Encyclopædia Britannica," "Chambers' Encyclopædia," "Pereira's Materia Medica," "Redwood's Supplement," "Pliny's Natural History," "Hippocrates' Medicine," the "Pharmaceutical Journal," and the "Chemist and Druggist." For the other portion, "Squire's Supplement" and "Martindale's Extra Pharmacopoeia" have been occasionally drawn from; whilst for a few pharmaceutical questions I have to thank our worthy honorary member, Mr. T. R. Treloar.

In conclusion, I trust that I have given you the main items and those which are of practical value, for the discussion of a work like this can be taken up in various ways.

Mr. W. B. Saunders, of Philadelphia, U.S.A., announces the publication of Da Costa's "Modern Surgery" (revised edition), McFarland's "Pathogenic Bacteria" (second edition), "American Text-book of the Diseases of Children" (second edition), and "American Text-book of Gynecology" (second edition), Vierordt's "Medical Diagnosis" (fourth edition), Griffiths' "Care of the Baby" (second edition), Butler's "Materia Medica and Therapeutics" (second edition). Among Mr. Saunders' forthcoming publications are Stengell's "Text-book of Pathology," B. C. Hirt's "Text-book of Obstetrics," "The American Pocket Medical Dictionary" (containing over 25,000 words). Early in the New Year will be published "An American Text-book of Diseases of the Eye, Ear, Nose, and Throat," edited by Drs. De Schweinitz and Randall; also, Church and Peterson's "Mental and Nervous Diseases."

PROCEEDINGS OF OTHER SOCIETIES.

MEDICAL SOCIETY OF QUEENSLAND.

THE 140th General Meeting was held on September 6th, 1898, in the Society's rooms. Present—Dr. Wheeler (President), Drs. Francis, Byrne, Hill, Orr, Love, Halford, and Turner. Visitor: Dr. G. P. Dixon.

G. P. Dixon, M.B., B.Ch. Syd., was nominated for membership by Dr. Turner, seconded by Dr. Francis.

SUPRAVAGINAL ABDOMINAL HYSTERECTOMY FOR SLOUGHING FIBROID.

Dr. BYRNE showed the specimen removed, and gave details of the case. Patient was a married woman, 24 years of age, and had had one child. She had been ill two years. Twelve months ago Dr. Penny, of Maryborough, had noticed enlargement of the uterus, since then she had had almost continuously a temperature of 100° to 101°, with bad-smelling discharge from uterus. She had been curetted four times. Cancer was suspected, but Dr. Love examined the tissue removed and could find no evidence of malignancy. After each curetting she improved for two or three weeks, and then became bad again. She finally became emaciated, extremely anæmic, and in a very weak condition. Finally, Dr. Byrne resolved to remove the uterus, which contained a large ulcerated mass. This was done by abdominal incision, dividing the cervix, and fixing the stump extra-peritoneally with a clamp, Dr. Hopkins assisting, and Dr. Turner administering chloroform and ether. The ovaries were healthy, but the uterus contained a fibroid, a large portion of which was undergoing putrefaction. Three hours after the operation the temperature rose to 103°, then fell to normal, and except on one day has remained normal. Rapid improvement followed in the general condition.

Dr. G. P. DIXON read "A Case of Hypertrophy of the Thymus Gland, causing Fatal Pressure Symptoms." (To appear in a future issue.)

Dr. TURNER remarked that he had read of cases closely similar, but had had no personal experience of them.

The 141st General Meeting was held on October 4th, 1898, in the Society's rooms. Present—Drs. Francis (in the chair), Hardie, Hill, Hopkins, Love, Gibson, Nall, Carvosso, and Byrne. Visitor: Dr. Kerr Scott.

G. P. Dixon, M.B., Ch.B., Syd., was unanimously elected to membership.

NEW PHARMACOPŒIA.

Dr. LOVE moved—"That this Society communicate with the Pharmaceutical Society of Queensland with the object of introducing the New Pharmacopœia into use on January 1st, 1899." Seconded by Dr. HARDIE, and carried.

FRIENDLY SOCIETIES.

In response to a letter which was read, Dr. LOVE moved—"That the hon. secretary reply to the Medical Defence Society of Victoria, thanking them for the courtesy conveyed by their invitation. That this Society considers that the relation of the Profession to the Friendly Societies in Australia is one which requires adjustment, and consequently that this Society cordially approves of the object of the meeting, but regrets the inability of any of its members to be present." Seconded by Dr. CARVOSSO, and carried.

EXTRA-UTERINE PREGNANCY.

Dr. BYRNE showed a two months' gestation removed by abdominal section.

Dr. HARDIE read for Dr. Turner a paper on a "Case of *Tuberculous Dorsalis*," affecting chiefly the upper limbs, and accompanied by gastric crises and epileptiform attacks. (See p. 463.)

Dr. LOVE stated that in a case under his care, pain was relieved by phenacetin (10 grains) and caffeine (2 grains). Morphia gave no relief.

ROYAL SOCIETY OF TASMANIA.

MEDICAL SECTION.

A MEETING of the Medical Section was held on October 5th, the following members being present: Drs. Bright (President), Clarke, Barnard, Alsop, Crouch, Ireland, Spark, Macgowan, Wolfhagen, and Sprott.

Minutes of last meeting were read and confirmed.

Drs. Drake and Giblin sent apologies for absence.

CORRESPONDENCE.

On letter received from Central Board of Health, the Secretary was instructed to write, in conjunction with the Medical Society of Launceston, and urge the Board to pay a fee for notification of infectious diseases.

Letters from Defence Association of Victoria and the Launceston Medical Society were ordered to stand over till a special meeting, to be called at an early date, dealt with them.

The subscription fee to the Section was fixed for the year at half a guinea.

PAPERS.

(1) Dr. SPARK read notes of a case of typhoid fever in a girl, aged 16 years. Patient had a relapse, and about the tenth week gangrene of the leg set in. Amputation at the thigh (junction of the middle and upper third) was performed, and the patient ultimately made a good recovery.

(2) Dr. SPARK outlined the history of a case of extra-uterine pregnancy admitted into the General Hospital. Patient was 46 years of age, and had nine children. She was supposed to be pregnant three months. Soon after admission abdominal section was decided upon, and Dr. Bright, under whose care the case was, performed the operation, removing a foetus of about two months from Douglas pouch. Tympanites developed rapidly, and she died eleven hours after the operation. *Post mortem* was made the following day, and showed that the posterior wall of the uterus was firmly adherent to the bowel, the lumen of the bowel being very much contracted. From the *post mortem* appearance the foetus had evidently escaped from the tube at a very early period of the pregnancy.

(3) Dr. MACGOWAN read a paper on chorea in a boy, aged eleven years. Patient was admitted into the General Hospital with erythema nodosum. Four days after admission he developed symptoms of chorea, presumably from another boy which lay in the next bed suffering from chorea. Ten days later endocarditis was diagnosed, and he died twenty-three days after admission.

(4) Dr. SPROTT exhibited a brain, with a hydatid cyst in the occipital lobe of the left hemisphere. The cyst communicated with the posterior horn of the left ventricle. Patient had a tubercular deposit on the apex of right lung, and it was thought his nervous symptoms were probably due to an extension of the deposit in the meninges. He was a deaf mute, and the case was therefore more difficult of diagnosis.

A special meeting was held on the 17th October "To consider the appointment of delegates to a conference in Melbourne to discuss the relations of the medical

profession to the Friendly Societies, and other business." The Secretary was instructed to write the Secretary of the Defence Association of Victoria, informing him none of the members could make it convenient to attend at the particular time appointed. The Section was, however, in sympathy with the movement, and any recommendations made at the conference would have the consideration and support of the Section.

LAUNCESTON HOSPITAL REFORM.

Letter from the Launceston Medical Society was read, asking the co-operation of the Section in having a reform effected in the management of that institution.

Resolved—"That this Section affirms the principle of an honorary medical staff in hospital management, and when the proposals of the Launceston Medical Society are made known this Section will be prepared to discuss, and as far as possible support, such proposals."

It was decided to hold the annual dinner on October 26th, which event brings the session to a close.

The first annual dinner of the Medical Section was held at Hadley's Orient Hotel, Hobart, on October 26th.

The President (Dr. Bright) presided, and amongst those present were the Secretary of the Royal Society (Mr. Alex. Morton), who was the guest of the section, Drs. Clarke, Walch, Wolfhagen, Jamieson, Ireland, Drake, Spark, G. L. Crowther, Sprott, Butler, Alsop, Giblin, Scott, Macgowan, Barnard, and Crouch.

Sir James Agnew, M.D., wrote regretting his inability to attend owing to indisposition.

After the usual loyal toasts, the Hon. Dr. BUTLER proposed, "Success to the Medical Section." In doing so he said the section, though only established two years ago, had done good work and had also been the means of bringing the members of the profession in closer contact with one another, as well as promoting those kindly feelings which ought at all times to exist amongst members of an honourable profession.

The PRESIDENT, in replying, thanked the members for the way they had worked during the session. He felt satisfied the section had done much to promote the interests of the profession. His duties as President had been as easy as they were last year, owing to the willingness of members to assist him in the work of the Section.

Dr. WOLFHAGEN proposed "Kindred Medical Societies," and paid a graceful compliment to the editors of the *Gazette* for the way they had assisted the Section by publishing the more interesting papers that had been read at the meetings.

Dr. DRAKE responded.

Other toasts followed:—"Royal Society of Tasmania," by Dr. Crowther, and responded to by Mr. Morton; "Hon. Sec.," by Dr. Crouch, and replied to by Dr. Sprott; "Hon. Treasurer," by Dr. Walch, and replied to by Dr. Clarke.

Several vocal items were rendered by Drs. Jamieson, Alsop, Ireland, Giblin, and Macgowan.

A most enjoyable evening was brought to a close by singing "Auld Lang Syne" and "God Save the Queen."

AN ENGLISH-TRAINED CERTIFICATED NURSE (medical, surgical, obstetrical), having considerable experience in city and country, wishes to obtain employment under medical supervision in the country. Nurse Meredith-Brown, 39 Upper William-street, Darlinghurst, Sydney.

ROYAL SOCIETY OF NEW SOUTH WALES, MEDICAL SECTION.

A MEETING of the above was held on Friday, October 21st, at 8.15 p.m., at the Society's House, 5 Elizabeth-street North, Sydney. There was a fair attendance of members and visitors present. Dr. Walter Spencer was elected to preside in the absence of the chairman of the Section.

The minutes of the preceding meeting were confirmed.

Dr. F. MILFORD exhibited a new form of dental splint, for use in cases of fracture of the jaw. Drs. Fiaschi, Reading, Spencer, and Messrs. Lugg and Hodgson discussed the subject.

Dr. FIASCHI read a paper entitled, "A Note upon Two Cases of Amputation of the Rectum for Extreme Prolapsus." (see p. 474.) Drs. Camac Wilkinson, Adam Dick, and the Chairman discussed the subject.

The discussion upon the paper entitled, "Disinfection in Notifiable Infectious Diseases,"* contributed on August 19th by Dr. W. G. Armstrong, M.O.H. for the Metropolitan Combined Districts was resumed. Dr. Spencer, Camac Wilkinson, and Adam Dick spoke, and Dr. Armstrong replied.

The meeting then terminated.

SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

THE annual meeting of the Sydney and Suburban Provident Medical Association was held on October 18th at 121 Bathurst Street, Sydney, at 8.30 p.m. Present—Drs. Abbott, Green, Spencer, Walton Smith, Macdonald, Gill, Carruthers, G. R. P. Hall, Doak, C. D. Clark, J. Parker, Binney, Neill, Walker-Smith, West, S. Jamieson, A. A. O'Hara (Hon. Sec.), Crago, and Worrall.

Dr. ABBOTT proposed that Dr. Walker-Smith take the chair. Seconded by Dr. WEST.

The CHAIRMAN congratulated the members of the active staff on the progress made by the Association.

The HON. TREASURER (Dr. Sydney Jamieson) made his financial statement, showing the highly satisfactory condition of the society, and at the conclusion of his report regretted that the stress of his professional work compelled him to relinquish the post of Hon. Treasurer. He thereupon moved that Dr. E. H. Binney be appointed Hon. Treasurer in his stead. Carried.

The meeting then proceeded to elect a general committee for the ensuing year, and the following gentlemen were selected:—Drs. Ralph Worrall (Chairman), C. D. Clark, Pockley, Hankins, Litchfield, Abbott, Mills, Clarence Read, J. A. Dick, Walker-Smith, West, S. Jamieson, Neill, R. Arthur, G. R. P. Hall, E. H. Binney, A. A. O'Hara (Hon. Sec.), W. Spencer.

From the general committee a sub-committee was elected as follows:—Drs. R. Worrall (Chairman), Walker-Smith, W. A. West, S. Jamieson, A. A. O'Hara (Hon. Sec.), G. R. P. Hall, E. H. Binney (Hon. Treas.), Walter Spencer, G. H. Abbott.

Dr. W. A. WEST begged to move a very hearty vote of thanks to Dr. Jamieson for the excellent work he had done as Hon. Treasurer. Seconded by Dr. O'Hara, supported by Drs. Binney and Walker-Smith and carried with acclamation.

* Vide *Australasian Medical Gazette*, October 30th, 1898, p. 422.

EASTERN SUBURBS (SYDNEY) MEDICAL ASSOCIATION.

EIGHTH ANNUAL MEETING.

THE eighth annual general meeting of the above Association was held on Friday afternoon, October 7th, 1898, at the Editor's Library, 121 Bathurst-street, Sydney, at 4 o'clock p.m.

The minutes of the preceding meeting were confirmed.

The annual report of the Council was read by the hon. secretary, and the financial statement was read by the hon. treasurer; both were adopted. The treasurer's report showed a balance of £9 1s. 8d. to the credit of the Association. The Council's report, amongst other matters, expressed disappointment at the inadequate action taken by the Council of the New South Wales Branch of the British Medical Association in dealing with the resolutions transmitted by a combined meeting of the Councillors of the various Medical Societies of the colony on August 31st.

The subscription for the current year was lowered. The officers for the past year were thanked for their services.

The office-bearers were elected as follows:—President, Dr. Frank Tidswell (Dr. Tidswell has since resigned owing to pressure of official duties; his resignation was received with regret). Vice-President, Dr. F. H. Quaipe. Councillors (3), Drs. L. J. Lamrock, Walton Smith, M. Matheson. Hon. Secretary, Dr. J. Adam Dick. Hon. Treasurer, Dr. W. J. Barkas. Hon. Auditors (2), Drs. L. E. F. Neill and P. J. Collins.

Other business was transacted, and discussion upon several matters was postponed.

The meeting terminated at 5.30 p.m.

SHORT EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

BY WALTER SPENCER, M.D., ENMORE, N.S.W.

Gl'Incurabili (Medical Journal of Naples), April 1, 1898.—Dr. Giuseppe Nola records a case of *Erysipelas* of the face and scalp in a debilitated patient, for which the usual approved treatment was inefficacious. The disease spread for a week, and the prognosis was very bad. In this desperate condition the doctor determined to inject phenol solution, not, as he had seen done, round the margin of the eruption, but at a distance. One c.c. injected subcutaneously into the arm reduced the temperature from 40° C. (105° F.) to 38° C. (101° F.). Another injection next day caused a true crisis of perspiration, with fall of temperature to 36° C. (circa. 98° F.), which heralded a complete cure four days after.

He believes this to be more than a favourable coincidence, because:—

I. The injection was made at the height of the disease, with maximum pyrexia, when not the least sign of abatement was apparent.

II. A third injection caused profuse general and continuous perspiration, which is not usual with *erysipelas*.

III. The thermal tracing did not correspond to the conditions of the cutaneous phlegmon, which retained its "ardor rubor et tumor" when the temperature fell.

IV. Twenty-four hours after the third injection the temperature rose again to 39° C. (c. 103° F.). It again descended, and remained definitively at the normal after another similar injection.

He remarks how small a quantity of phenol controlled a most severe infection when the injection was

made in a distant part, notwithstanding that many patients have perished in spite of larger quantities injected centripetally round the margins of the cutaneous focus.

The solution employed was:—

Crystallised carbolic acid	...	...	cg. 20
Aquæ distillatæ	..	...	gr. 20
Glycerini	...	...	gr. 2

of which 1 c.c. was employed for each injection.

Annals of the Board of Health, Buenos Ayres, December, 1897.—The Sanitary Inspector draws a vivid picture of the *city bakeries*, where crowds of workmen sleep in small unventilated places, the bread mass being covered over with anything ready to hand, which may happen to be apparently clean, or may be the sweaty clothing of the workmen. It is to be hoped that this state of things is peculiar to Buenos Ayres.

Cronica Medica, Mexico, July 1, notices the excellent results obtained with *calci sulphid.* in treatment of cases of *Diphtheria* when the serum treatment had failed.

Gaceta Medica, Mexico, May 1, 1898.—Professor Lavista and others have been for some time utilising the hæmostatic property of *gelatine*, which was first made known to the Biological Society of France by Professors Dastre and Floresco in 1896, and it is in daily use at the Military Hospital. It produces rapid coagulation of blood, which it also gelatinises. Dr. E. R. Garcia recommends *gelatine* in normal saline solution (7 x 1000) twice sterilised at 100° (212° F.) for fifteen minutes at two days' interval. If the temperature should exceed 100° its gelatinising property is lost.

The strength of the solution varies according to the purpose in view. The usual strength ranges between 5 per cent. and 10 per cent.; an antiseptic may be added without impairing the coagulating and gelatinising properties. It should not be very warm when used, inasmuch as it would retard the jellification which occurs by cooling, and which unites with the coagulative action. Strong vaso-constriction produced by heat would, for a moment, arrest hæmorrhage and the *gelatine* not coming into immediate contact with blood, would not exercise its coagulative power. It should therefore not be much above the normal body heat.

It is pronounced to be a hæmostatic of the first class, and whilst it must not be expected to restrain hæmorrhage from a severed carotid or femoral artery, it serves for minor blood vessels and is a most advantageous substitute for the numerous ligatures of a surgical operation, rendering numerous forceps and ligatures left behind in wounds unnecessary.

For surgical wounds it may be applied on absorbent aseptic pledgets, contact being prolonged as much as possible. It is useful in epistaxis and metrorrhagia, and facilitates primary union of wounds.

Les Nouveaux Remèdes, Paris, August 24, 1898, translates the analyses made by Dr. Smolenski of the relative values of fish as food. It is worth noting that whereas preserved stockfish appears in the table as richest in proteids, salmon and mackerel come last of all. September 8.—Dr. Lebovici writes on *Quinine employed subcutaneously*. He prefers the hydrochlorate alone in solution (1 in 5) to its combination with antipyrin (called chinopyrine), which causes pain and local induration, though its toxicity is less. Two decigrams may be given even thrice a day.

Iodoformogen is iodoform combined with albumin. It is a light inodorous insoluble powder, possessing the properties of the former.

Aqua Bromoformi contains Bromoform 30.35 cg. in 100 grammes of water, and is recommended as a useful vehicle.

Gazette de Gynécologie, Paris, September 15, 1898, moralises on a report in the *Journal d'Hygiène* as to cost of rearing and educating a youth from birth up to 25 years, when he became self-supporting as a sub-lieutenant in the army. The statistics were furnished by an average household whose accounts were thoroughly kept, and the total cost appears 33,509fr. 55c. For a girl up to 17 years, including music lessons, etc., the cost was 13,239fr. 10c.

The pay of an officer, even supposing that he rises in rank does not, it is said, justify the investment. If this be so, it follows that the fortunes of the family are diminished, and as similar experience occurs in almost every family it must end in the ruin of the nation. The cost of rearing children being too great, the French are compelled to produce fewer children, whence it follows that the nation must not only suffer ruin in wealth but also ruin in men.

Of the French nation,

2,640,894 families have 1 child	
2,364,202 " " 2 children	
1,585,960 " " 3 "	
975,616 " " 4 "	
572,285 " " 5 "	
322,651 " " 6 "	
231,658 " " 7 "	

The average of life in different countries is said to be:—

In Spain...	32½ years
Prussia ...	36 "
Italy ...	39 "
Bavaria ...	39½ "
France ...	43½ "
Switzerland ...	44½ "
Belgium ...	44½ "
England ...	45½ "
Sweden ...	50 "

Annales de Médecine et Chirurgie Infantiles, Paris, September 1, 1898, reports the remarks of M. Netter to the Soc. Med. des Hôpitaux concerning *Kernig's sign* in *Meningitis*.

It is very precious. Examining the patient in the dorsal decubitus, with the lower extremities in thorough relaxation, it is quite easy to completely extend the knee. The patient being then raised to a sitting posture, the knees become more or less flexed and cannot be thoroughly extended. Contraction of the flexors keeps them at an angle which is never more than 135°, and which may be 90°. Complete extension becomes easy as the trunk is inclined backward. This sign is present in 90 per cent. of all cases of meningitis observed, including tubercular and cerebrospinal, and has not been found in any other disease. Thus in doubtful cases it clinches the diagnosis. When found alone it manifests an aborted attack. The issue of Sept. 15 gives a eulogy of Protargol 5 per cent. solution as prophylactic collyrium in *Ophthalmia Neonatorum*.

PEOPLE'S PRUDENTIAL BENEFIT SOCIETY.
LTD., SYDNEY, N.S.W.

THE following are the Medical Officers of this Society:—Messrs. O. Bohrmann, R. Bohrmann, Lennhoff, A. O'Connor, Lougher, (Leichhardt), Ford Hughes (Ashfield), Tayler (Woollahra), Scott (Balmmain), Anderson (Petersham), J. Murray-Gibbes (North Sydney), Hanson (Waverley). Chemists:—Peterkin (City), Olson (Newtown), Butterfield (Bedfern), Goldrick (Glebe), Powell (Paddington), Brothwood (Petersham), Brereton (Marrickville).

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

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SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
E. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 21ST NOVEMBER, 1898.

EDITORIALS.

THE DECREASED BIRTH-RATE IN NEW SOUTH WALES.

THE volume of Vital Statistics for 1897, recently issued by the Registrar-General for New South Wales, presents some interesting problems. The birth-rate per thousand of population has fallen steadily from 37.20 in 1888 to 28.42 in 1897. This decrease is more marked in the metropolis (Sydney and suburbs) than in the

country districts. In Sydney the rate has fallen from 41·09 to 29·01 ; in the country from 35·35 to 28·15. During the same period the illegitimate birth-rate has risen from 5·08 to 6·58 per hundred births for the whole colony, or from 7·65 to 9·79 for the metropolis. During 1897 the mothers under 18 years of age of illegitimate children totalled 264, as against 216 married mothers. One mother bore an illegitimate child at 12 years of age, while no less than 14 unmarried girls were under 15 years when they gave birth to infants. No less than 2,433 of these unhappy women registered their offspring during the year. In addition 251 children were born within one month of marriage of the parents, and of these 45 were born within a week. Over 2,000 children were born within seven months of the marriage of the parents.

Here we have a problem which legislation must deal with soon unless we are content to become a weak and degenerate country. The birth-rate is falling at an alarming rate; the illegitimate rate is increasing; nearly ten per cent. of the children born are conceived out of wedlock!

What are the causes which conduce to this state of affairs? Various answers are given to this question. By some it is asserted that the decrease in the birth-rate is due to altered circumstances. Many young men who were in good positions a few years ago have now insufficient means to allow them to take on the responsibilities of matrimony. But there are others who assert, and apparently with reason, that there is a growing disinclination on the part of young married women to become mothers. After marriage they do not wish to be troubled with children, and they either make use of artificial checks to conception or call in the aid of the abortionist. There is no shutting the eyes to the fact that the abortionist flourishes in Sydney; married women openly boast that they prevent conception, while some go so far as to procure abortion on themselves.

The Legislature must soon deal with this problem. Abortion must be put down, indecent advertisements must be suppressed, quack literature must be prevented from falling into the hands of our young people. Our wives and daughters must not have their senses offended by the announcements in the press and placarded throughout our chief thoroughfares that "Dr. So-and-So treats Private and Nervous Diseases," or removes irregularities from whatever cause arising. Is it too much to expect the guardians of our public morals to take up this subject which is eating the heart out of our young and otherwise healthy country?

INDIGENOUS VEGETABLE DRUGS.

MR. J. H. MAIDEN, Government Botanist and Director of the Botanic Gardens, Sydney, published in the October number of the *Agricultural Gazette of New South Wales*, an extremely valuable article on the above subject. The author has already published some valuable papers on the same subject, and we have read this, the latest, with genuine pleasure.

Mr. Maiden thinks we are very little indebted to the Australian aborigine for information as to the medical properties of our plants. He is inclined to think that native Australian drugs will probably be found peculiarly efficacious in the treatment of diseases, or modifications of diseases, which are co-extensive with their distribution. Here is a field for practical work among our brethren in the country districts, and some of them may feel disposed to take advantage of Mr. Maiden's offer to assist any medical man or chemist to get material for experimental purposes.

A large number of native plants are described and their physiological and therapeutic actions commented upon. It is to be hoped that some of our medical men will take up this important subject. It will give us great pleasure to publish the results of such researches. Most countries have local remedies for local diseases, but Australia is contented for the most part to treat its endemic diseases according to old world methods, notwithstanding the fact that some of these ailments present local characteristics.

DR. WILLIAM PEPPER.*

DR. WILLIAM PEPPER died 28th July, 1898, of heart disease, at Pleasonton, California. Dr. Pepper was the son of a distinguished member of the Medical Profession, who made a name for himself as the Professor of the Theory and Practice of Medicine in the University of Pennsylvania. The son graduated in the same University in 1862, and became a teacher in his Alma Mater in 1868, for two years upon morbid anatomy, then for six years on clinical medicine, when he was appointed professor of that subject, and held the chair until 1884, when he succeeded Dr. Alfred Stille in the chair of the Theory and Practice of Medicine, the duties of which he performed up to the time of his death.

During his association with the University,

* For materials of this notice we are indebted to the *International Dental Journal*, Philadelphia, September, 1898.

being a man of wealth, indomitable energy and perseverance, having broad, liberal and comprehensive views upon the subject of medical education, he rapidly developed in a practical manner his views regarding the higher medical education, and under his guidance the status of the University of Pennsylvania became the most prominent in the American Continent.

His literary abilities were of an untiring nature. He founded the "Medical Times," which he edited in 1870-1. He also edited "The System of Medicine by American Authors" (five volumes, Philadelphia, 1885-86). In conjunction with Dr. John F. Meigs, successive editions of their work on Diseases of Children. He was also a frequent contributor to the leading Medical Journals and the transactions of the Medical Societies. As Medical Adviser of the Centennial Exhibition of 1876, his services were recognised by the King of Sweden decorating him as Knight Commander of the Order of St. Olaf, and he received further honours from various Universities and Corporations.

He especially distinguished himself during the period that he was Provost of the University of Pennsylvania, by the marvellous growth and impetus given to the University—in extension of its usefulness, and multiplication of students. He distinguished himself by the interest he took in the Department of Dentistry, and through his influence and energy is due the prominent position and high tone which is now acknowledged to belong to the American Dental Schools.

He was closely in touch with the National Association of Dental Faculties, and at once had it recognised by the Authorities of the University, and its regulations accepted as the guide for the Department of Dentistry.

His death leaves a vacancy in the list of those whom we honour, and the world seems all the more lonely that this active, brilliant mind is no longer a worker in it.

AUSTRAL CYCLE AGENCY.

A proper list of Cycle Accessories is most essential to the wheelman who aspires to be up-to-date. A good cycle cape, perfect adjusting instruments, a powerful inflator, a midget repair outfit, a reliable lamp, a good bell, detachable mud-guards, and a cyclometer should always be purchased. The Austral Cycle Agency receive every mail large shipments of these up-to-date articles, and their stock is worth looking at.

LETTER TO THE EDITOR.

EXAMINATION OF URINE IN INSURANCE CASES.

(To the Editor of The Australasian Medical Gazette.)

DEAR SIR,—A leading life assurance office has recently issued instructions to the medical officers to test the urine in every case.

In answer to an enquiry on the matter, I was informed that the urine must be passed in the examiner's presence. This is to apply to female as well as male cases.

I should feel much obliged if you could offer some suggestion as to the mode of procedure most likely to meet with satisfaction in female cases. It appears to me that the examiner could only swear to the urine in a female case if he drew it off by catheter, which, of course, is out of the question.—I am, yours faithfully,
W. B. CLAY.

Arnccliffe, October 27th, 1898.

[The only suggestion that we can offer under such circumstances is that a trained nurse be employed, either to be present during the act of urination, or, if necessary, to pass a catheter, and that the insurance company be invited to pay an extra fee for the trained nurse's services. Our impression, however, is that very few women will seek insurance from offices exacting these conditions.—ED.]

ANNOTATION.

PRESENTATIONS TO MISS GOULD, MATRON OF THE SYDNEY HOSPITAL.

ON the evening of October 17th ult. the Board Room of the Sydney Hospital (which was appropriately decorated for the occasion) was crowded with members of the Honorary and of the Resident Medical Staff, with members of the Nursing Staff, with the Executive Officers of the Institution, and with the Wardsmen and other attendants; the occasion being the presentation of several valuable gifts to the retiring Matron (Miss Gould), who for over seven years had ably filled the post of Matron and Superintendent of the Nursing School.

Dr. THOMAS EVANS, as Chairman of the Medical Board, in presenting Miss Gould with a solid silver salver on behalf of the Honorary Medical Staff, said: Gentlemen, Members of the Honorary Medical Staff of the Sydney Hospital, I am honoured in standing here as your spokesman to-night. Miss Gould, by your own act no longer Matron of this Hospital, we are here to present you with a token of our esteem and regard. We know that you would not have taken your departure from among us without good reason, still we regret your decision on public and on personal grounds. This Hospital loses a worthy servant, and we—who are in the best position to judge, can testify to the fact that the satisfactory work done in it is largely due to the efficiency to which, under your direction and control, its nursing staff has attained—lose a valued colleague. We are pleased that a lady occupies your place who, setting aside her own personal qualifications, has been trained under your supervision. I am glad to be able to assert that while you have held office the relations existing between the Honorary Medical Staff and the Nursing Staff have been of a cordial nature; without such harmony no happy results can ensue in the treatment of the patients who are entrusted to our care. In the future which you have chosen you take with you the good wishes of the men who now stand

around to do you honour. We ask you to accept this piece of plate, Matron, in token of our goodwill, of our hearty good wishes for your welfare, and as a reminder that your honest work is not as bread cast on the waters, but is now bearing, and will continue to bear, good fruit.

Dr. McCLELLAND, Medical Superintendent, said: Miss Gould, on behalf of the Resident Medical Staff, I ask you to accept this afternoon tea set as a memento of the esteem in which you are held by us. Dr. Evans has left me very little to say, but I heartily endorse every word which has been spoken by him. The Residents generally have very little to do with the Matron, but they can all speak well of the high degree of efficiency to which the nurses have attained under your training; while those of us who are the senior members of the Resident Staff, and have been brought into almost daily contact with you, can certainly affirm that the success of the Nursing Staff depends very largely upon the close attention to matters of detail, which you have always impressed upon the nurses as being so important. We feel, too, that owing to their excellent training by you the nurses have been of considerable help to the doctors. While we are sorry that you are going, we are glad to know that your place is to be filled temporarily, and we trust permanently, by one who has received a thoroughly scientific and practical training from you, and we can assure Sister Creal that we will loyally stand by her and afford her every assistance possible. Again we ask you to accept this tea service, and our best wishes for a very successful future.

The ACTING MATRON (Sister Creal), on behalf of the nursing staff, presented Miss Gould with several valuable articles.

Mr. JONES (House Steward), on behalf of the executive officers, presented Miss Gould with a marble clock.

Miss GOULD thanked all the donors for their valuable presents. She said as she was accustomed to speaking to the nurses she would try to think that they were the only people present, and address her remarks to them. She thanked them all for their loyal support. Like Miss Florence Nightingale, she had no faith in *born* nurses, but preferred those who had had a thorough practical training. She considered three years none too long to acquire that training. She was strongly opposed to any system of prizes for the nurses; that was all very well for school-girls, but not for nurses in a hospital. The knowledge that they had done their duty well should be sufficient reward. Their motto at the Sydney Hospital had been *thoroughness* rather than *brilliance*. A lot of nonsense was sometimes spoken about *lady* nurses. She maintained that every nurse who was properly trained was a lady. As a member of the Royal British Nurses Association, she gave her decided opinion that a thorough training was essential before women called themselves *trained* nurses, and that they ought to have a system of registration out here similar to that in England, as it was not fair to the properly trained nurses nor to the public that women who, after a short experience in a hospital, and proving their unsuitability for nurses, should, on leaving, adopt nurse's uniform and style themselves *trained* nurses. Two attempts had been made to bring about the registration of nurses in Sydney. The later attempt failed through the death of Dr. Huxtable. She was pleased to think that her successor, as well as all the sisters at the Sydney Hospital, were colonials, and had been trained in the institution under her predecessor and herself. It showed that it was no longer necessary to import their nursing sisters; in fact, nurses trained in England had much to unlearn in coming to this climate. She was proud of having been trained in the colony herself.

NEW INVENTIONS.

FLETCHER'S AUTOMETRIC STOPPER.

THIS ingenious contrivance combines the advantages of a permanent stopper, which can neither break nor get fixed, and a graduated measure, always ready for use, and reserved for the one fluid for which it is provided.

By loosening the stopper, and slightly compressing the air chamber attached, any required volume of liquid can be instantly withdrawn from the bottle. It being unnecessary to pour out any of the contents, no spilling or other waste of liquid can occur. Moreover, the inconvenience incidental to the use of the ordinary minim measure, with the necessary washing and frequent breakage, is entirely obviated.

Medical men who have frequent occasion to measure small quantities of liquid will find Fletcher's Autometric Stopper invaluable for rapid and accurate work.



DIRECTIONS FOR USE.

To Fill.—Dip the graduated tube in the liquid and compress the large ball. On relaxing the pressure the liquid will rise to the top of the tube.

To Measure.—Lightly press the small ball between the thumb and finger by placing the former on the letter P. This opens an air valve, and allows any required quantity of liquid to flow out.

COMBINED URINOMETER AND THERMOMETER.

This is a very useful improvement upon the ordinary urinometer, and will prove of special value in examinations of candidates for assurance, now that most of the insurance companies insist that the persons desirous of obtaining a policy must pass the specimen in the presence of the medical examiner. This instrument, while indicating the specific gravity of the urine, also gives

the temperature of the fluid by means of the thermometer, very ingeniously attached to the index of the instrument. The accompanying engraving gives a very good idea of the instrument.



Messrs. Fletcher, Fletcher and Co., of No. 18 O'Connell-street, Sydney, are agents for both the foregoing contrivances.

VIBRONA CHAMPAGNE.

WE have received from Messrs. Fletcher, Fletcher and Company, whose Australian office is at No. 18 O'Connell-street, Sydney, a sample of "Vibrona Champagne." We found it very palatable and invigorating. The following is the analysis and report by the *Lancet* :—

"The analysis of this wine was as follows :—Alcohol (by weight), 10.08 per cent.; ditto (by volume), 12.49 per cent. (equivalent to proof spirit 21.89 per cent.); total solid matter, 1.81 per cent.; mineral matter, 0.13 per cent.; sugar, 0.13 per cent.; fixed acids (calculated as tartaric), 0.87 per cent.; volatile acids (calculated as acetic), 0.0072 per cent. We have not examined a champagne presenting less sugar than is here shown. It is the smallest amount we have ever found in sparkling wines, and is practically a negligible quantity. To the palate the wine is exceedingly 'dry,' just a suspicion only of an added bitter being evident. The wine contains five grains of standardised Cinchona Bark in the form of neutral hydrobromate. This addition in no wise spoils the delicate character of the wine itself, but on the contrary has rather a pleasant effect on the palate. The wine was in perfectly sound condition, and possessed, as the analysis also shows, practically no volatile acidity as represented in acetic acid. The sample submitted to us yielded on suitable treatment with solvents, the principles of Cinchona Bark, which, occurring in the form of neutral hydrobromates, are well tolerated, and without the unpleasant effect known as 'cinchonism.' The wine has a pleasing, delicate, vinous flavour. Its tonic value will be readily conceded from the results of our analysis."—*April 30th*, 1898.

MEDICAL PRACTICE IN RISING TOWN IN QUEENSLAND FOR SALE. Appointments—Hospital, £200 per annum; Health Officer, £25 a year in fees; Friendly Societies, about 120 members. Cash Practice from £600 to £700 per annum. Price £200. For further particulars apply to T. H. Houghton, Civil Engineer, 12 Spring Street, Sydney.

PUBLIC HEALTH.

During the year 1897 only 245 vaccinations were performed by Government Vaccinators in New South Wales. This is equal to 0.65 per 100 births registered, and is by far the smallest number recorded since the institution of public vaccination in 1861. Only six persons were vaccinated in the metropolitan area (Sydney and suburbs), all of these being over 10 years of age. Vaccinations were performed as follows in the country districts, viz.:—Bega, 17; Cootamundra, 5; Dubbo, 6; Emmaville, 17; Lithgow, 1; Orange, 8; Parramatta, 103; Quirindi, 67; Rydstone, 11; Warren 4. The cost of vaccinations in 1897 was £37.

On September 21st a medical practitioner at Lithgow, N.S.W., was summoned by the police under section 21 of the Public Health Act for neglecting to give notice to the local authorities of a case of diphtheria. A plea of guilty was recorded, and a fine of 5s. and costs imposed.

Diphtheria has been prevalent at Ulverstone, Tas.

For the month of September 14 cases of typhoid had been reported throughout Tasmania, and one death had resulted. For the same month 21 cases of scarlet fever had been notified, and 12 cases of diphtheria. One death had resulted from each cause. Measles had also been prevalent in different parts of the colony.

Dr. Sprott, Health Officer, reports that during the month of September there were 60 deaths registered in the district of Hobart. In the city proper there were 28 deaths—males, 15; females, 13—giving an annual death-rate equal to 14.0 per 1000. The principal causes of death were :—Cancer, 2; phthisis, 1; heart disease, 3; bronchitis, 5; old age, 5; pneumonia, 2; diseases of the stomach, 2; and the remainder were of a general nature.

At a meeting of the Tasmanian Central Board of Health recently the secretary drew attention to the rapid increase taking place locally in the number of bodies embalmed. Mr. Mault said, in his opinion, the subject was one of such importance from a public standpoint that the Board should have some supervision over it. If it were allowed to become a general custom, he considered that it would be the means of opening the door to a number of illegal acts. The subject was discussed at some length, but no definite understanding was arrived at.

VITAL STATISTICS.

NEW SOUTH WALES.—The Registrar-General has recently issued his annual report on the vital statistics of the colony for 1897. The ages of mothers of children registered ranged from 12 years to 60; that of the fathers from 17 to 78. There were 417 cases of twin births (415 males, 418 females); 1 of triplets (3 males, 1 stillborn); 1 of quadruplets, at Sydney, the youngest of the four being stillborn. 6.58 per cent. of the births were illegitimate.

SYDNEY.—There were 1,042 births and 576 deaths registered in Sydney during September. The principal causes of death were :—Measles, 66; influenza, 9; puerperal fever, 5; diphtheria, 5; typhoid fever, 2; bronchitis, 32; pneumonia, 60; cancer, 29; phthisis, 40; scarlet fever, 2; whooping cough, 19.

MELBOURNE.—The chief causes of death in greater Melbourne during September were as follows :—Measles, 15; diphtheria, 7; cancer, 30; phthisis, 69; scarlet

fever, 2; whooping cough, 2; bronchitis, 26; typhoid fever, 2; pneumonia, 71. There were in all 1,045 births and 548 deaths registered during the month.

BALLARAT.—There were 4 deaths from measles, 1 from diphtheria, 1 from cancer, 6 from phthisis, 2 from bronchitis, and 10 from pneumonia during the month of September. There were in all 60 deaths.

ADELAIDE.—There were 115 births and 80 deaths in Adelaide during August. The principal causes of death were:—Measles, 2; cancer, 3; phthisis, 9; old age, 10; pneumonia, 2.

HOBART AND LAUNCESTON.—During September 144 births were registered, with 87 deaths. There was 1 death from scarlet fever in Launceston.

BRISBANE.—During the month of September there were 163 births and 107 deaths registered in Brisbane. The principal causes of death were: Measles, 11; scarlet fever, 18; diphtheria, 3; cancer, 6; phthisis, 23; pneumonia, 8; enteritis, 8.

NEW ZEALAND.—In the four boroughs of Auckland, Wellington, Christchurch, and Dunedin there were, during September, 8 deaths from measles, 14 from cancer, 15 from phthisis, 18 from heart disease, 13 from bronchitis, and 17 from pneumonia.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

APPOINTMENTS AT THE PRINCE ALFRED HOSPITAL, SYDNEY.

At the last meeting of the conjoint board, consisting of the Senate of the University and the directors of the Prince Alfred Hospital, Mr. F. A. Bennet, M.A., M.D., Ch.M. Aberdeen, was appointed honorary physician for diseases of the skin; Mr. G. T. Hankins, M.R.C.S., was appointed honorary surgeon for diseases of the ear, throat, and nose; Mr. Cecil E. Purser, B.A., M.B., Ch.M., was elected an honorary physician in the room of Dr. G. E. Rennie, resigned, and Mr. E. M. Pain, M.B., Ch.M., was elected medical superintendent of the hospital in the room of Dr. F. J. T. Hawkins.

The British Medical Association has granted a research scholarship of £150 to Dr. G. Elliot Smith, of Sydney, and now of St. John's College, Cambridge, for the purpose of enabling him to undertake an investigation into the changes in the brain in general paralysis of the insane.

Hobart General Hospital.—The balcony in front has been completed at a cost of £1000, and is a fine piece of work.

OBITUARY.

ALLAN CAMPBELL, L.R.C.P. EDIN., L.F.P.S. GLAS., M.L.C.

THE death of the Hon. Dr. Campbell leaves a void in the ranks of the medical profession in South Australia which it will be difficult to fill. He was the chief—one might say the sole—representative of the profession in active philanthropic work, and for many years he has been the only medical member of the legislature. In regard to philanthropic work, it must not be assumed that other medical men were not interested in it, but Dr. Campbell made such work his speciality, and performed it so efficiently that there was little cause for others to intervene. Since he came to the colony, 30 years ago, there is probably not a single work of that

nature with which he has not been associated; and the fact that he left no room for others to take an active part will render it all the more difficult to replace him. It is impossible to enumerate all of them. Perhaps the one which stands out most prominently is the Children's Hospital. Since its foundation he has been its mainstay, guiding it with a firm hand through many difficulties, until it has grown from a small beginning into a large institution, of which any colony may be proud. His first consideration in this, as in many of his acts, was for the sick children, but he also determined that the hospital should exert a wider sphere of usefulness. This was first manifested by making it a training school for nurses; then its wards were placed at the disposal of the medical school; and finally, when bacteriology became a necessary equipment for medical purposes, he strongly advocated the establishment of a laboratory at the hospital, and opened its doors for the use of practitioners outside the hospital. This latter action is characteristic of the man. He made no pretensions to being a practical scientist, but he was quick to grasp the practical application of scientists' work. In respect to bacteriology, his action supplied a want which the Government did not see their way clear to supply at the time, and there can be no doubt that thereby the public health has been the gainer. It has further been justified by the manner in which the profession has availed itself of the advantages of the laboratory.

The District Trained Nurses Society was another philanthropy into which he threw his whole heart and soul. He not only was concerned in the initiation of this work, but he worked hard and successfully to establish it on a firm foundation. It was a characteristic of his that, having put his hand to the plough, he never looked backwards; and perhaps, had he spared himself more, he might have lived longer.

The extension of the laboratory privileges to the medical profession has been referred to. Only last July the Institute of Hygiene and Bacteriology was founded under the auspices of Dr. Campbell, the objects being to further extend the advantages of the laboratory by placing it under the control of this Institute, and to create a society for educating public opinion on health matters. This Institute will feel his loss more than most of the others with which he was connected, because it is still in its juvenile phase of existence; but it is to be hoped that its members will determine to exert themselves to make it a success in honour of his memory. The inaugural address which he delivered to the Institute dealt with tuberculosis from a public health point of view, and the grasp of the subject, as well as the masterly style of delivery, were worthy of the occasion. It is an open secret that had his life been prolonged he intended to organise a crusade against consumption, so deeply was he imbued with its terrible consequences and its possibilities of cure, and there is not the shadow of a doubt that he would have carried it through successfully. Let us hope that his mantle has fallen on someone's shoulders who will take up this important matter.

Nor was his career as a legislator less distinguished than his career as a philanthropist. To have represented one constituency for twenty years in the Legislative Council shows the confidence felt in him. He could always be relied upon to represent the best interests of the medical profession in Parliament, but those who were associated with him in endeavouring to amend the Health Bill now before the House of Assembly can testify that while he had every consideration for his profession, he had a greater consideration for the health of the people. The time and

trouble which he gave outside the House to perfecting this bill was immense, and the energy and ability which he displayed in arguing points and convincing members in the House was equally great. The presidential address which he delivered at the last meeting of the Association for the Advancement of Science, held in Sydney, showed the statesmanlike view he took of public health administration. His contention was that the control of infectious diseases and of the meat and milk trades should be in the hands of some central authority, and he strove hard to get this embodied in the bill. He first tried to get the administration of these duties placed under the Central Board of Health; and when the Government successfully opposed this, he turned his attention to the erection of County Boards of Health to undertake this work. His action in regard to this Bill in educating public opinion and enlightening his fellow-members has been so great that we trust that when it finally emerges from Parliament it will be in such a form as to warrant its being handed down to posterity as "Allan Campbell's Act."

His death, as well as his life, was closely associated with his philanthropic work. One of his last works was the establishment of a convalescent home on the hills in connection with the Children's Hospital. On Saturday he attended and spoke at the opening ceremony, in spite of threatening attacks of syncope, and he was gratified to be able to announce that the building had been opened free of debt. On Sunday he was struck down and carried off by his old complaint, angina pectoris. He practically died in harness, after leading his latest enterprise to a successful issue.

JAMES LAWLER DONOVAN, L. & L. Mid., K.Q.C.P., Irel., L.R.C.S.I. 1871, died at Sydney on October 23. Dr. Donovan, who was formerly in the Royal Navy, arrived in New South Wales in 1876. He practised at Cooma, then at College-street, Sydney, and again at Cooma. Owing to ill-health, he retired from practice about three years ago. He was 48 years of age.

FRANK SMITH CROWTHER, M.B. 1887, Ch.B. 1888, who left the Alfred Hospital, Melbourne, only a month ago to settle at Warracknabeal, Vic., died there from typhoid fever in October.

CHARLES GEORGE KENT, M.B. 1884, Ch.B. 1885, Melb., M.R.C.S.E. 1886, formerly resident surgeon at Brisbane Hospital, and for the last five years resident surgeon at Peak Downs Hospital, Q., died on October 27. He was 37 years of age.

MILITARY INTELLIGENCE.

New Zealand.—His Excellency the Governor has been pleased to approve of the undermentioned appointments:—*No. 3 Co. N.Z. Native Rifle Volunteers* (Auckland): Peter Alexander Lindsay to be Surgeon-Captain. *Canterbury Yeomanry Cavalry Volunteers*: James Cecil Palmer to be Surgeon-Captain.

CHANGE OF ADDRESS, ETC.

CABOLAN, Dr. J. F., has removed from Kawa Kawa to Rotorua, N.Z.

CHESSON, Dr. H., has succeeded to the practice of Dr. C. Johnson at Picton, N.S.W.

CORTIS, Dr. W. R., has removed from Cowra to Bathurst, N.S.W.

DEANS, Dr. JOHN, has removed from Sorell, Tas., to San Remo, Vic.

GUTHRIE, Dr. T. O., who has practised at Lyttelton, N.Z., for over fifteen years, has left the colony, intending to reside in Scotland.

HALFORD, Dr. A. C. F., late of Brisbane Hospital, has removed to Clermont, Q.

HARKNESS, Dr. EDWARD, late of Fingal, Tas., has succeeded to Dr. J. F. Matthews' practice at Yea, Vic.

HOME, Dr. GEORGE, has removed from Masterton to New Plymouth, N.Z.

HORROCKS, Dr. H., late of the Perth Public Hospital, has commenced practice in Milligan-st., Perth.

JACKSON, Dr. E. S., recently of the Brisbane Hospital, has commenced practice in Brisbane.

JONES, Dr. E. S., has commenced practice at St. Alban's, N.S.W.

LAMB, Dr. WM., late of Wellington and Levin, N.Z., has commenced practice at Geelong, Vic.

MACKY, Dr. J., has returned to Sydney, and resumed practice at 134 Glebe-road.

MCCARTHY, Dr., of Sheffield, Tas., has succeeded to the practice of the late Dr. Downie, of Mathinna, Tas.

MILLAR, Dr. J. B., a recent arrival, has settled at Carterton, N.Z.

MISKIN, Dr. L. J., has taken up his residence at the Perth Public Hospital.

PRING, Dr. Arthur, has removed from Tenterfield, N.S.W., to Taroom, Q.

RICHARDSON, Dr. C. S., has removed from Launceston to Devonport, Tas.

RINDER, Dr. A. W., formerly of Wedderburn, Vic., has succeeded to the practice of the late Dr. F. S. Crowther at Warracknabeal, Vic.

SCOTT, Dr. J. A. N., has removed from Warrnambool to Hamilton, Vic.

SMITH, Dr. P. D., has commenced practice at Launceston, Tas.

SIDES, Dr. R., formerly of Bourke, N.S.W., has commenced practice at Cunnamulla, Q.

WALDEN, Dr. F. J., a recent arrival, has commenced practice at Sorell, Tas.

WARD, Dr. J., formerly of Ophir, has removed to Lumsden, Otago, N.Z.

WATSON, A. E. Henry, L.R.C.P., L.R.C.S. Edin., late of Port Germein, S.A., to be Resident Medical Officer Marble Bar, W.A., *vice* Dr. Nix, deceased.

MEDICAL APPOINTMENTS.

The following medical appointments are announced:—

Angwin, S. L., M.B., &c., to be Officer of Health for Borough of St. Arnaud, Vic., *vice* Dr. J. D. Collier.

Bain, J. W. D., M.R.C.S., &c., to be a Public Vaccinator for S.A. Benington, Dr. B. C., to be Health Officer for Claremont, W.A.

Dickenson, Dr. J., to be Health Officer for Bridgetown, W.A. Gibson, Thos., M.B., &c., to be a Public Vaccinator for S.A.

Halford, A. C. F., M.B., &c., to be Resident Surgeon at the Clermont Hospital, Q.

Harkness, E., L.R.C.S., &c., to be Public Vaccinator at Yea, Vic., *vice* Dr. J. F. Matthews.

Hogg, J. B., L.R.C.P. Edin., &c., to be Inspector of Hospitals for the Insane in Queensland, and Medical Superintendent of Goodna Hospital for Insane, Q., *vice* the late Dr. R. B. Scholes.

Horrocks, Herbert, M.D., B.Sc. Lond., M.R.C.S., L.R.C.P., D.P.H. Lond., appointed Honorary Assistant Physician, Public Hospital, Perth, W.A.

Jones, R., L.R.C.S., &c., to be Public Vaccinator at Eaglehawk, Vic., *vice* Dr. J. C. McKee.

Lethbridge, R. W., to be a Senior Medical Officer for Hospitals for the Insane, Vic., *vice* Dr. E. E. Roseabum, promoted.

Macquarie, C. N., L.R.C.P., &c., to be Officer of Health for Bright Shire, Vic., *vice* Dr. C. W. Simons.

Meek, R. A., M.B., &c., to be Assistant Medical Superintendent for Hospital for Insane, Goodna, Q.

Miskin, Dr. L. J., to be Resident Medical Officer of the Perth Public Hospital, W.A.

Nicoll, J. R., M.B., &c., to be Resident Medical Superintendent of Toowoomba Hospital for Insane, Q., *vice* Dr. J. B. Hogg, promoted.

Scott, J. A. N., M.D., &c., to be Public Vaccinator at Hamilton, Vic., *vice* Dr. L. Robinson.

Steele, John, Dr., to be a Senior Medical Officer for Hospitals for the Insane, Vic., *vice* Dr. W. A. Barker, promoted.

Ward, J., M.D., &c., to be a Public Vaccinator for District of Lumsden, N.Z.

MEDICAL RESIGNATIONS.

The following medical resignations are announced:—

- Collier, J. D., L.R.C.S. Irel., &c., as Officer of Health for Borough of St. Arnaud, Vic.
- Harding, R. F., L.R.C.P. Irel., &c., as Assistant Medical Superintendent of the Hospital for the Insane at Goodna, Q.
- Matthews, J. F., M.R.C.S., &c., as Public Vaccinator at Yea, Vic.
- McKee, J. C., L.R.C.S., &c., as Public Vaccinator at Eaglehawk, Vic.
- Robinson, L., M.D., &c., as Public Vaccinator at Hamilton, Vic.
- Simons, C. N., L.R.C.S., &c., as Officer of Health for Bright Shire, Vic.

REVIEWS.

DISEASES OF THE STOMACH. By John C. Hemmeter, M.B., M.D., Philos. D., Clinical Professor of Medicine at the Baltimore Medical College, Consultant to the Maryland General Hospital. Philadelphia: P. Blakiston, Son, and Co. Sydney: L. Bruck.

This fine work is divided into three parts—I, Anatomy and Physiology of the Digestive Organs—Methods and Technics of Diagnosis; II, Therapy and Materia Medica of Stomach Diseases; III, The Gastric Clinic.

Under part I. there is an excellent description of the stomach and other digestive organs. This is accompanied by some beautiful illustrations, some of which are artistically coloured.

The second part is most practical and interesting. Beginning with a review of the principles of dietetic treatment of gastric diseases, the author leads us into the dietetic kitchen, and gives recipes for preparing invalid foods, and also discusses the dietetics of alcohol and alcoholic beverages, and the various methods—medical and surgical—of treatment.

In the third part, Professor Hemmeter conducts us through the clinical wards. Gastritis—acute and chronic—ulcers, malignant and benign tumours, and other lesions are dwelt upon in such a way as to demonstrate the fact that the author is a thorough master of his subject. The volume represents an immense amount of painstaking and arduous work, and we know of no subject connected with the stomach which has not received its due amount of care and attention. As civilisation advances, the stomach becomes the seat of hitherto unknown diseases, which modern science helps us to deal with. The work is up to date, and the author shows that he is well acquainted with the literature of the subject. We know of no work from which the physician may gain more information than this. It is indeed complete.

PATHOLOGICAL TECHNIQUE: A practical manual for the pathological laboratory. By Frank Barr Mallory, A.M., M.D., Assistant Professor of Pathology, Harvard University Medical School; Assistant Pathologist to the Boston City Hospital; Pathologist to the Children's Hospital and to the Carney Hospital; and James Homer Wright, A.M., M.D., Director of the Laboratory of the Massachusetts General Hospital; Instructor in Pathology, Harvard University Medical School, Philadelphia: W. B. Saunders. Melbourne: James Little.

"This book, designed especially for practical use in pathological laboratories, both as a guide to beginners and as a source of reference for the advanced," we welcome as a most useful addition to our store of practical text-books. In addition to being eminently practical, it combines in one cover methods of *post*

mortem, bacteriological, and histological examination, a feature we have not observed in other similar treatises. It is divided into three parts.

Part I. deals with the details of *post mortem* examinations. The directions given are clear and concise. In addition to the ordinary methods, paragraphs are added descriptive of the examination of infants, private autopsies, and the restitution of the body.

Part II. comprises bacteriological examinations. It includes six sections, treating respectively of apparatus, culture-media, bacteriological examinations at autopsies, study of bacteria in cultures, bacterial diagnosis, and clinical bacteriology. The whole of this part is excellent, and so eminently practical, that criticism is almost superfluous. We would suggest, however, that the preparation of agar-agar tubes would be facilitated by adopting the method of first softening with acetic acid, and of using a jacket filter during filtration. In making serum-agar tubes we have found that by using pleuritic or ascitic fluid in place of blood serum, equally good results are obtained from a material always to be procured at a large hospital. In the section "Bacteriological Diagnosis," study is made of the chief pathogenic forms, with special regard to their morphology, mode of growth on different media, pathogenesis, and occurrence. Under the heading "Clinical Bacteriology," all the more common clinical methods are clearly outlined. The paragraph dealing with serum diagnosis of typhoid might with advantage have been expanded, and more definite instructions as to the dilution of the serum would have conduced to the likelihood of its successful use.

Part III. is taken up with histological methods. The necessary apparatus is described, and many methods and stains are carefully considered. A section on blood examination is added. Though dissenting from some of the authors' methods, we consider this book one of the best of its kind in the English, or, rather, American language (for some of the Americanisms are painfully prominent), and recommend its addition to the library of everyone interested in practical pathology.

The illustrations are numerous and excellent.

EPIDEMIC DIPHThERIA: A RESEARCH ON THE ORIGIN AND SPREAD OF THE DISEASE FROM AN INTERNATIONAL STANDPOINT. By Arthur Newsholme, M.D. Lond., M.R.C.P. Lond., Examiner in State Medicine to the University of London, Medical Officer of Health of Brighton. London: Swan Sonnenschein and Co., Ltd., 1898. Price, 7s. 6d. net.

This interesting and instructive work represents an immense amount of hard work extending over some years, and is written in Dr. Newsholme's best style.

The earlier chapters deal with the prevalence of diphtheria throughout the civilised world. Tables of statistics are given for every country, and also the history of the disease in London and its bearing upon the method of spread of the disease. The labour involved in collecting and arranging these figures and drawing conclusions must have been immense. The disease appears to be universal, and personal infection is the most powerful factor in its spread.

The author tenders his cordial thanks to Mr. George Leslie, of New Zealand, and Dr. Ashburton Thompson, of Sydney, for their assistance. The charts are both original and valuable.

TROPICAL DISEASES: A MANUAL OF THE DISEASES OF WARM CLIMATES. By Patrick Manson, M.D., LL.D., Aberd., F.R.C.P. Lond. Physician to the Seamen's Hospital Society; Lecturer on Tropical Diseases at St. George's Hospital and Charing Cross Hospital Medical Schools; Medical Adviser to the Colonial Office and Crown Agents for the Colonies. With 88 illustrations and 2 coloured plates. London: Cassell and Co., 1898. Price, 10s. 6d.

This manual appeals directly to practitioners in Australia, for it gives adequate information on those diseases which are common here, yet are incompletely described in general text-books. Coming from such an authority as Dr. Manson, we feel that we are dealing with no mere compilation, but descriptions of diseases which the author has seen and studied in various parts of the world.

The volume is divided into seven sections, the first of which deals with Fevers. Naturally enough, malaria is described at full length. This is probably the best account of malaria in the English language, and standing alone would be sufficient to make the book a success. Dengue, Tropical Typhoid, Heat Stroke, &c., are some of the fevers of interest here which are included under section I.

Section II. contains an excellent account of Beri Beri, which is so common in Australia at the present time.

Section III. deals with Abdominal Diseases, including Dysentery, Liver Diseases; and section IV. contains chapters on Leprosy, &c.

The fifth section contains full illustrated descriptions of the various animal parasites, and the diseases associated with them. Australian practitioners will be particularly interested in this.

The sixth section is devoted to Skin Diseases—Prickly Heat, Sloughing Phagedena, Boils, &c.; while the last deals with local diseases of uncertain nature.

The volume is indispensable to all those practising in the tropical parts of Australia, and indeed to all of us, even those who practise in the great cities, for it is imperative on us to diagnose and treat correctly the diseases of patients who come to us from the far north or the interior of our continent.

The question so often asked, where shall I find a good description of such and such a tropical disease? is now easily answered.

RINGWORM, IN THE LIGHT OF RECENT RESEARCH.

By Malcolm Morris, Surgeon of the Skin Department, St. Mary's Hospital. London, Paris, and Melbourne: Cassell and Co., Ltd., 1898.

This volume is an expansion of a paper read at the last meeting of the International Congress of Dermatology, held in London in 1896.

Under the head of Etiology, Mr. Morris discusses the Parasitic Theory, Sabouraud's Doctrine, and the recent researches of Bodin, Fox and Blaxall, Leslie Roberts, Mibelli, Rosenbach, Kröning, Ullman, Waelzbach, Palagatti, Ducrey and Reale, and Unna, and compares the results.

The conditions and mode of growth of the fungus, its action on the hair and skin, and its effects, are dealt with in another chapter.

The clinical varieties of the disease, its treatment, and prophylaxis provide material for the remaining chapters.

Mr. Morris believes in the plurality of the ringworm fungi, and gives an account of the chief species met with.

The work, which is beautifully illustrated by means of twenty-two micro-photographs and a coloured plate, is complete, and forms a valuable addition to medical literature.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following persons, having presented their diplomas, have been duly registered as legally qualified medical practitioners by the respective boards:—

NEW SOUTH WALES.

Jones, Edward Stanley, Lic. R. Coll. Phys. Lond. 1897; Mem. R. Col. Surg. Eng. 1896.

Little, Joseph Henry, M.B. et Mast. Surg. Univ. Edin. 1871.

NEW ZEALAND.

Millar, James Binnie, M.B. et Mast. Surg. Univ. Glas.

QUEENSLAND.

Kuipers, Johannes Cornelius Staats Exam. 1893; M.D. 1896, Univ. Jena.

TASMANIA.

Walden, Frederik James, M.B., C.M. Edin. 1897.

Smith, Philip Douglas, M.B., C.M. Edin. 1894.

VICTORIA.

Deans, John, M.R.C.S. Eng. 1862; L.S.A. Lond. 1862; M.D. Durham, 1886.

Dunkley, Francis Ernest, L.R.C.P. et R.C.S. Edin. et L.F.P.S. Glas. 1898.

Lamb, William, M.B. et Ch. M. Edin., 1876.

Additional qualifications registered.

Strong, Robert Henry, M.R.C.S. Eng. 1896; L.R.C.P. Lond. 1898.

Owens Edward Matthews, M.D. Brussels 1898.

WESTERN AUSTRALIA.

Miskin, Leonard John, M.R.C.S. Eng. 1894; L.R.C.P. Lond. 1894; M.B. Lond. Univ. 1896; B.S. Lond. Univ. 1898; F.R.C.S. Eng. 1897.

BIRTHS, MARRIAGES, AND DEATHS.

BIRTHS.

JONES.—On the 19th October, at Viwa, Burlington-road, Homebush, N.S.W., the wife of Dr. G. Manier Jones, of a daughter.

THANE.—On the 31st October, at Atherfield, Yass, N.S.W., the wife of P. Thornton Thane, L.R.C.P. Lond., etc., of a son.

MARRIAGES.

LOWES—LOVEGROVE.—On the 12th October, at All Saints' Church, Petersham, N.S.W., by the Rev. Henry Plume, Frank, third son of the late Thomas Arthur Clowes, Oamaru, N.Z., to Marion Constance, youngest daughter of Dr. J. F. Lovegrove, Petersham, formerly of Timaru, N.Z.

GADEN—GARNSEY.—On the 27th October, at Christ Church, Sydney, by the Rev. A. H. Garnsey, M.A., Frank Hart Barker Gaden, L.R.C.S., L.R.C.P. Edin., eldest son of William Henry Gaden, Esq., of Molangool, Queensland, to Theodora Kinglake, fourth daughter of the late Rev. Charles Frederick Garnsey, Sydney.

KELLY—BRIDGE.—On the 3rd October, Walter M'Donnell Kelly, physician and surgeon, of Elizabeth-street, Sydney, eldest son of the late Walter M'Donnell Kelly, Esq., M.D., of Palmfield House, Crook, Co. Durham, to Florence Bridge, daughter of the late John Bridge, Esq., Woolbroker, Sydney.

DEATHS.

DONOVAN.—On the 23rd October, at Sydney, Dr. James L. Donovan, aged 48.

KENT.—On the 31st October, at his late residence, Peak Downs Hospital, Q., Dr. Charles George Kent, eldest son of the late W. H. Kent, Kedron Lodge, Brisbane, aged 37 years.

KNAGGS.—On the 2nd November, at her residence, 5 Lyons-terrace, Hyde Park, Sydney, Helena Charlotte, wife of Samuel T. Knaggs, M.D., etc.

CLINICAL RESEARCH.—Dr. Litchfield is prepared to make examinations for medical men as follows:—1. Diphtheria bacilli. 2. Tubercle bacilli. 3. Widal's reaction. All information supplied by the above at 118 Glebe-road.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

CLINICAL NOTES ON A CASE OF AMOEBIC ABSCESS OF THE LIVER AND LUNG.

BY THOMAS FIASCHI, M.D., CH.D., PISA, SYDNEY.

D. L., age 35, a native of Scotland, was admitted into the Sydney Hospital on the 27th May, 1898, under the care of my corresponding physician, Dr. Dixon. The patient's statement was that for the last five years he had resided at Aneiteum, an island in the New Hebrides, well known as a hotbed of malaria and dysentery. Six months after his arrival there, he contracted malarial fever, but had no other illness since. He was quite sure that he had never suffered from diarrhoea or dysentery. Admitted that he had been drinking gin freely.

About the end of March, two months before admission, he began to suffer with pain in the right shoulder and right side of chest, which soon extended to the hepatic region, and affected his breathing. At the end of April he began to expectorate a quantity of purulent sanguineous matter, which continued to increase, whilst at the same time the pain had become easier. Finding himself getting worse, he steamed from the New Hebrides ten days before admission, and suffered much vomiting and pain during the voyage.

Condition on admission.—Temperature 102°. Both liver and spleen are enlarged. Liver dullness extends to $\frac{1}{2}$ inch above the umbilical line, and is 10 inches high in the mid axillary line. The whole of the right lung behind is comparatively dull to percussion, and presents absence of breath—sounds in the lower two-thirds. Urine normal. Patient looks very ill. The sputum was examined by Dr. Isbister, and found composed chiefly of disintegrating pus cells, with blood corpuscles. No hydatid membrane, hooklets, tubercle, bacilli, or amœbæ found. A comparative absence of all micro-organisms was noticed. Bearing in mind Dr. H. Lafleur's advice,* *that in hepato-pulmonary abscess which is discharging itself spontaneously and freely, it is questionable whether surgical interference is at all likely to advance the recovery of the patient,*" I advised non-interference for the time.

Three weeks later I was asked to see him again, and found that, although there had been

abundant expectoration of sanguineous purulent matter, patient had a temperature of a decidedly hectic type, oscillating between 99° and 102°·8, with frequent pulse and respiration, and rapidly-increasing weakness. One important point to which I wish to draw your attention is that, during this first month of residence in the hospital, his bowels presented no symptoms pointing to dysentery. He never had more than one motion a day, and often would go two or three days without one. Also, that he did not complain of any pain about the bowels. Finding that he was losing ground rapidly, I thought it right not to withhold the feeble chance of recovery, that an operation offered.

On the 22nd June, under ether anæsthesia, having made sure of the presence of pus with an aspiratory needle, I made an incision in the seventh intercostal space about 3 inches long, with its centre intersecting the posterior axillary line. Through this I was able to pass my finger in a large multi-locular cavity with trabecular divisions, limited above by the diaphragm, which presented a rounded opening communicating with the right lung. A large drainage tube was left in. Immediately after the operation all expectoration stopped, and large quantities of a discharge similar to the sputum came out through the drainage tube, and a few days after the temperature fell to between 98° and 100°, the patient appearing to be much better. This promising state of things continued till about the middle of July, when he began to complain of pain in the right side, lost his appetite, felt generally unwell, and presented again a hectic temperature. The discharge was thick and viscid, faintly acid in smell, and in colour appeared like a cluster of dull red patches on a grey ground, and a few days after the operation Dr. Isbister found amœbæ in it. On this discovery I directed my treatment to the destruction of the amœbæ, and had the abscess cavity well sprayed morning and evening with various germicides. For the first month we used *Sanitas*, until the middle of July, when he began to get worse. As Dr. Isbister reported that great numbers of living amœbæ were yet found, I discarded *Sanitas* for a $\frac{1}{2}$ % solution of formaline, which, not being satisfactory, was, after a few days, substituted by a spray of an acid solution of quinine, and later on by a 1 in 4 solution of peroxide of hydrogen. Finding that all these measures did not prevent the reproduction of the amœbæ in great numbers, and having heard from Dr.

* Allbutt's System of Medicine, vol. IV., page 189.

Isbister that Dr. Verco, of Adelaide, had privately informed him of the efficaciousness of a permanganate of potassium solution, this was used as a spray, and apparently was the most efficacious in diminishing the number of living amœbæ. However, in spite of these local measures, and of every constitutional attempt to strengthen him, the patient gradually and steadily kept getting worse. The discharge showed no signs of diminishing in quantity, causing, as a result of this large loss of blood, a state of grave anæmia.

Furthermore, about the beginning of September patient began to complain of *tormina*, and passed, occasionally, motions of a distinctly dysenteric character. The scene closed on the 14th October, after five days of severe pain in the right hypochondrium, which necessitated the constant influence of morphia. Altogether seven months elapsed from the outset of the disease and death, and three and a-half months after the opening of the abscess.

I have brought before your attention this case for the following reasons:—

1st. It establishes beyond doubt the presence of amœbic dysentery in the New Hebrides.

2nd. It corroborates the views first strenuously advocated by Dr. MacLeod, of Shanghai, that dysentery is a factor in nearly every case of tropical liver abscess*. Up to within a month of the patient's death, we had no symptom of dysentery, though existing in a latent form, as revealed by the large ulcers found in the cœcum.

3rd. It is a proof of the relationship between certain forms of dysentery and the amœba.

4th. It confirms the experience of other surgeons as to the very untractable and fatal nature of amœbic abscess of the liver. Lafleur states that on seven cases observed in Baltimore only one recovered.† The cause of this enormous mortality is the fact that, differently from what happens in other abscesses, when well drained, the amœbic shows no tendency to heal, and necrosis of the surface of the liver abscess takes place. This, no doubt, is due to the action of the amœbæ. If these protozoa could be destroyed, healing and recovery would take place. Now it is proved that amœbæ can be easily killed *in vitro* by a solution of 1 in 5000 of quinine, or by a very weak solution of nitric acid. What makes it then so difficult to obtain the same result on the amœbæ in the living human liver?

I am inclined to think that so long as the original amœbic *nidus* in the large intestine re-

mains untouched by germicides, there takes place a constant re-infection of the liver with new amœbæ, carried to it by the portal blood stream from the bowels. I think that in the future, as soon as a liver abscess is opened, and that amœbæ are found, whether symptoms of dysentery may have been apparent or not, we should wage active war to the amœbæ, not only in the liver abscess by means of sprays, but also in the large intestine by means of large irrigations with suitable quinine or nitric acid solutions, and hope that by so doing we may diminish the present large mortality of these cases.

Pathological Notes upon the above case of Amœbic Abscess of Liver and Lung.

By J. L. T. ISBISTER, M.B. ADEL.; SYDNEY.

THESE notes refer more especially to the examination of the discharge from the operation wound, and to the state of the liver and lung at the post mortem examination.

Shortly after the patient's admission the sputum was examined for the amœbæ, but none were found. It contained red blood corpuscles, pus cells and debris, together with a very few micro-organisms which might readily have come from the mouth itself. It was in the discharge from the operation wound that the amœbæ were first found; they were not numerous, and five consecutive subsequent examinations gave a negative result, although later on in the course of the case they were always to be found in the discharge—sometimes actively motile or resting or dead, sometimes few and sometimes numerous.

If the sputum contained few micro-organisms the discharge contained less as it was not contaminated by having to pass through the lung, pharynx, and mouth. A very few streptococci and one or two stray bacilli were found, but the presence of these, or most of them, might be accounted for by contamination of the operation wound itself. It would be practically an impossibility to keep such a wound perfectly aseptic.

The amœbæ were not unlike a large round epithelioid cell, except that they were more refractive and of a slight bluish tinge. They contained granules and vacuoles, one or more of the latter was not infrequently of a light red colour due to absorbed blood pigment.

The periphery was clear and jelly-like in appearance. This became more evident when the pseudopodia were thrown out. Some few amœbæ were so active that it was almost

* "British Medical Journal," 31st March, 1894, p. 678.

† Allbutt's System of Medicine, vol. IV., page 169.

impossible to even roughly sketch their changing outline.

Impossible to sketch altering shapes.

Most of the amœbæ were in diameter about four times that of a red blood corpuscle. The size varied a little but not very much. It is said to be constant for the same abscess, although it may vary in different abscesses.

When a dysenteric stool containing amœbæ is allowed to stand the stool becomes temporarily acid and the amœbæ are destroyed. Apparently something more than mere acidity is required to destroy them—perhaps the presence of some micro-organisms whose growth is favoured by an acid medium—for in some instances active amœbæ were found in the wound discharge after the latter was kept for a couple of days and had become stale and acid.

As regards the post mortem appearances the specimen explains itself. The chief interest centres around the liver, right lung and large intestine. The liver and lung were adherent, and the intervening portion of the diaphragm practically obliterated. The abscess cavity was about 10 inches long and 4 inches in diameter, it lay immediately to the right of the spinal column. The apex reached to the second intercostal space, and the base overlapped the right kidney. The greater part of the space was obtained by the compression of the lung upwards, and by a large conical excavation into the base of the lung—this latter opening into a bronchus.

The remains of the lung are a small shrunken and compressed mass with pleuritic adhesions all over. The actual excavation in the liver itself was small, about the size of a mandarin orange, and situated on the upper and outer surface of the right lobe. This is said to be the typical position of an amœbic abscess, and is accounted for by the amœbæ escaping through the base of an ulcer of the bowel into the peritoneal cavity, and being carried upwards into the fold overlying the upper surface of the liver.

It is interesting to compare the amœbæ with the hydatid, both of which have a preference for the liver. The latter is found there in 57 per cent. of all cases, whilst the former is almost exclusively in that position, the intestine excepted.

The one starts from the dysenteric ulcer of the cæcum, and the other, which is about six times as large, from the stomach. Both may be passive and be carried along by the portal stream, but they both may also have an intrinsic movement of their own.

The large intestine shows the amœbic ulceration of the cæcum and commencement of ascending colon, together with a little in the sigmoid flexure.

The largest ulcers are 1½ in. in diameter. They are more or less circular, covered with a yellowish-white slough, and the edges undermined. The base involves the submucous coat, but shows no tendency to perforate.

All the coats of the bowel are thickened, especially in the region of the cæcum.

The ulcers showed no signs of healing, and there was not any scarring from old previous ulceration.

There is at the present time a second case of amœbic abscess in the wards of the hospital. This also has perforated the diaphragm and base of right lung, and has opened into a bronchus. The amœbæ have been found in the sputum and stools.

The *post mortem* reports of the hospital for six and a-half years show that there have been twenty-two *post mortem* examinations on cases of hepatic suppuration. Of these 50 per cent. were due to hydatid, and 32 per cent. were associated with ulceration of the large intestine, the majority, if not all, of these latter being probably of amœbic origin. Dr. Manson says that in England 50 per cent. of hepatic abscesses are amœbic. In New South Wales the percentage is not so high, but this is probably accounted for by the greater frequency of hydatid.

BRITISH MEDICAL ASSOCIATION.

NEW SOUTH WALES BRANCH.

A General Meeting of this Branch will be held at the Royal Society's House, Elizabeth Street, Sydney, on Friday, 23rd December, at 8.15 p.m.

Business :—General.

G. T. HANKINS, Hon. Secretary.

BLUE MOUNTAINS, N.S.W., "MOORECOURT," SPRINGWOOD.—This well-known and extensive mansion is now open as a mountain sanatorium for the reception of visitors requiring change of air with all the comforts of an English home. "Moorecourt" has an elevation of 1,250 feet above sea-level, stands in its own park of 40 acres, portion of which is laid out in shrubberies, lawns, flower and kitchen gardens, and is within five minutes of Springwood railway station. Special terms for families. Dr. Dagmar Berne is the principal.

REMARKS ON A FIRST SERIES OF FIFTY SALPINGO-OÖPHORECTOMIES.

By E. FAIRFAX ROSS, SURGEON TO THE LEWISHAM HOSPITAL, ETC., SYDNEY.

Disease.	Removal of both Tubes and Ovaries. Number of Cases.	Removal of one Tube and Ovary. Number of Cases.	Recovered.	Died.	Case No.	Remarks.
Soft Edematous ...	...	...	...	...	1	1. Virgin, <i>æt.</i> 17, tumour above umbilicus, seven years ago—cured.
Fibroid of Uterus...	1, 2, 3	...	...	3	0	2. Multipara, <i>æt.</i> 35, tumour just below umbilicus, one year ago—cured. 3. One para, <i>æt.</i> 37, fibroid in left broad ligament, removed it as well as appendages. Recent.
Multiple Fibroids of Uterus	1	...	...	1	0	
Tubal Pregnancy— Ruptured ...	1, 2	...	...	2	0	1 & 2. Both in early months, and operated within a few hours of the rupture.
Hæmato-salpinx ...	1, 2x	1, 2	...	4	0	2x. Had old tubo-ovarian disease on right side and recent ruptured tube on left side.
Solid Tumour of Ovary ..	...	1, 2	...	2	0	1. A large tumour, sarcoma of right ovary; died 18 months after operation. 2. Carcinoma of left ovary; alive and well now, but only four months since operation.
Ovarian Cystoma ...	1, 2	...	...	2	0	1. Complete division of adherent bowel; sewed it up at once; patient well now, six years since operation. 2. Also did a ventral-fixation of uterus for prolapse.
Pyo-salpinx ...	...	...	...	...	...	2. No autopsy, died four days after operation.
	1, 2, 3, 4, 5, 6	...	...	...	...	3. Died of Septic-peritonitis on 14th day.
	7, 8, 9, 10, 11	1	...	9	3	7. Tubercular disease, died in 20 hours. 10. Tubercular disease; recovered; omentum and intestines the seat of tubercular deposit. 11. Tubo-ovarian abscess on left side, right tube and ovary also diseased. Recovered.
Chronic Oöphoro-salpingitis ...	1, 2, 3, 4, 5, 6, 7	1, 2, 3x, 4, 5x	...	...	...	2x. Also removed a large parovarian cyst.
	8, 9, 10, 11, 12, 13	6, 7, 8, 9, 10, 11x	23	1	...	12. Took anæsthetic very badly, severe shock and collapse, and died 12 hours after operation.
						3x. Also did a ventral-fixation of uterus; she had a child at term 18 months after, the confinement was very easy; both now alive and well.
						5x. Also a ventral fixation of uterus; delivered of a child at term many months afterwards; both alive and well when seen recently.
						11x. Also removed a medium-sized parovarian cyst.
				46	4	= 50.
Also; Freeing uterus and fimbriated ends of both tubes, and also ovaries, from pelvic adhesions, with ventral-fixation of prolapsed uterus.				2	0	In both these cases I was pledged not to remove the diseased appendages, so had to content myself with freeing adhesions and suspending the uterus; both cases were greatly improved, and have not reported themselves since leaving hospital.

All the operations were abdominal. There were four deaths: three were after removing pus-tubes; the third was "tubercular," and the difficulties of removal in such cases are very great, the patient died twenty (20) hours after operation. The fourth death followed the simple removal of both appendages for chronic oöphoro-salpingitis, she took the anæsthetic badly, suffered much from shock, and died twelve hours after operation.

Pyo-salpinx—twelve cases.—Three after what I believed to be criminal abortion (but could not prove); five due to gonorrhœal infection; two due to tubercle; one undefined; and one after ten years, as an inflamed tube suddenly became a tubo-ovarian abscess; she recovered.

Most of the fifty cases presented no operative difficulties, but some (especially the tubercular cases) were very difficult, and one case was a source of great anxiety whilst operating, on account of the danger to the ureter, viz., a large, soft œdematous fibroid growing from the left side of the uterus, between the layers of the left broad ligament, extending very deeply down into the pelvis, and upwards above the level of the fundus; this was successfully removed by "decortication," to use the term Professor Pozzi prefers, and the sac, or bag, from which it was removed was wiped dry, sewn up, and allowed to drop back, undrained, with the uterus into the pelvis; as there were other smaller fibroids in the uterus, both appendages were also removed. The patient made an uneventful recovery. I was fortunate in having the assistance of Dr. Fourness Barrington in this case.

Pedicles.—Secured with No. 20 twisted soft silk, soft to prevent cutting through a yielding pus-tube, and large to stand a great strain in tying; tied with a double interlocking ligature, and the vessels secured singly in exceptional cases only.

Abdominal Wound.—Never stitched in layers, but by interrupted sutures including all the tissues. No yielding of the scar nor ventral hernia has occurred in this series, but most of the cases are yet too recent to exclude such.

Drainage.—I consider it impossible to effectively drain the pelvis through the abdominal wound; indeed, I believe it to be productive of harm. Did occasion arise I would drain an abscess cavity through the vagina, or make use of "marsupialisation." In "washing out" (in its fullest sense) a fouled pelvis I have the greatest confidence, and usually employ simple boiled water, and always leave some behind.

After Treatment.—In two cases only morphine was exhibited, on account of exhaustion

following prolonged vomiting. Both cases secured some hours rest, then started vomiting as badly as ever; both recovered. I believe in some few cases of pronounced restlessness morphine is of great value. As a rule nothing was given by mouth till the bowels acted. (This seems cruel, but in my opinion is the best treatment.) My rule is, on the evening of the second day to start to get the bowels to act, and continue till they do act, then feed. Hot water enemata (to be retained) and hypodermic injections of heart and nerve tonics are relied on to support the strength till the action of the bowels and proper expulsion of flatus show the intestines act. Any other mode of treatment usually caused disappointment, and retarded recovery.

FOUR CASES OF NEPHRO-LITHOTOMY.

BY G. HERBERT HOPKINS, F.R.C.S. ENG.,
BRISBANE, Q.

THE series of cases I am about to bring before you to-night are interesting from several points of view. I propose, firstly, to read the cases separately, reserving any comments I may have to make until the end.

(1) W. T., aged 30 years, was sent to me by Dr. John Ure, of Brisbane. He complained that for the last four or five years he had suffered from periodical acute pain in the right loin. He stated that he was never more than three days free, the pain came on suddenly, was acute in character, cutting and shooting, and lasted for some two or three hours, but there was no history of testicular retraction. He stated that he frequently noticed that after an attack of pain the urine was thick when passed, and contained a sediment.

On examination he was a spare man. Palpation at site of pain revealed nothing abnormal. Some tenderness on deep pressure in right loin, also on heavy percussion.

Urine, between attacks of pain, was normal, but quantity was somewhat diminished. After an attack of pain contained albumin (small quantity), a few blood corpuscles, and numerous pus cells.

The case was diagnosed as one of renal calculus, and operation advised.

On January 6th, 1897, I exposed the right kidney through a lumbar incision. On palpation nothing was to be felt. I thereon opened through the kidney tissue into the pelvis, and passed in a long bullet probe, bent at the end to represent a bladder sound. After some

exercise of patience in manipulation, the probe grated against some hard substance, and with some little difficulty I was able to secure with a sinus forceps the stone I now show, weighing 12 grs. A tube was placed in the pelvis of the kidney, and the wound dressed. The tube was removed in twenty-four hours. The patient made an uninterrupted recovery, and in ten days was up.

(2) On the 29th January, 1898, I was called to see Mrs. A. W., aged 49 years. She told me she had been suffering from "indigestion" for twelve months; she had had various advisers, among others, "The Indian Doctor," and had also, in the words of the advertisement, been "a frequenter of the parlours of the Polypaths." The sole results of the various treatments (?) she had undergone was to leave her considerably poorer in pocket, and worse in health. The only reason I could make out for the "indigestion" diagnosis was the fact that she suffered constant aching pain in the left hypochondriac region, refused almost all food, and was in a very emaciated condition.

On examination I found her sallow, thin, and anæmic; tongue coated with a dry brown fur. Pulse 80, and somewhat feeble. Temperature 102°. The left lumbar region was occupied by a large mass, which extended upwards under the ribs, as far down as the iliac crest, and reaching about to the middle line of the body. It was dull on percussion, tense and somewhat elastic to the touch, and not in any way movable. I was shown some urine recently passed which contained a large amount (almost half) of pus; there was also some fulness in the left loin, but not much tenderness anywhere over the swelling. The diagnosis of renal abscess, either the result of calculus or tuberculosis, was made, and an incision in the loin was urged.

On 31st January, Dr. Connolly kindly administering the anæsthetic, I made an incision in the left loin, midway between the last rib and the iliac crest. After dividing the muscles to and including the quadratus lumborum, I opened into a large cavity, and evacuated over a pint of pus. Passing the finger into the cavity, I came upon a small calculus, as it appeared, but on further exploration I found and removed a calculus weighing 130 grains, finding that the small piece first dislodged was broken off the larger one as you see.

The entire kidney being disorganised by the prolonged suppuration, the question of nephrectomy was entertained, but owing to the collapsed condition of the patient I decided to

simply drain the cavity, leaving the removal of the kidney to a future date, if advisable, as I considered that its immediate removal would result in the prompt death of my patient.

She rallied gradually from the shock of the operation, the wound discharged freely, but she gradually sank again, and died on 20th February, nearly three weeks after the operation, the cause of death apparently being simple exhaustion.

(3) Wm. McG., aged 36, groom. This patient I was called to see on 18th May, late at night. I found him in great pain, which he referred to the umbilical region. He stated that it was a cutting pain, but did not shoot about the abdominal cavity. It commenced in the left lumbar region, and graduated towards the umbilicus. The testis was not affected. A quarter of a grain of morphia gave him some relief, and when I called next morning he was out.

He called on me twice at intervals of about ten days, when I found the paroxysms of pain were very periodic, occurring every four weeks. He stated he had had much medical advice about them, and had been an inmate of the General Hospital for some four months, and that he had suffered in this way for over a year. He stated he was tired of his life under present conditions, as he could follow no employment owing to the recurring pain in his side.

On examination I found him a spare man, with a strikingly anxious expression, a retracted abdomen, and a slight tenderness on palpation of the left kidney, which was much increased by heavy percussion in the left loin.

Examination of the urine on three different occasions showed a trace of albumin on one occasion only, and twice about two pus cells in the field of the microscope under a Swift's $\frac{1}{8}$ " power.

The quantity and sp. gr. of the urine was normal, and it possessed an acid reaction. With some difficulty I prevailed on him to enter a private hospital, with a view to having his kidney explored.

On 28th June, 1898, I exposed the left kidney by a T-shaped incision in the loin, and after careful manipulation discovered a hard lump in the pelvis. The pedicle of the kidney being very short, I decided that in this case the safest way to enter the pelvis was through the kidney tissue, and therefore incised the organ along its posterior border. With some little trouble I was able to extract the stone I now show you, weighing 40 grains. There being practically no pus in the kidney or

pelvis, I stitched the kidney with a continuous suture, and sutured the incision in the loin with the exception of one end, in which a small tube was inserted. That was left in situ twenty-four hours, and then removed. The wound healed by first intention in four days, and the patient was discharged from the hospital in fourteen days.

(4) E. T., aged 32, came to me complaining of a dull aching pain in the right side. She had suffered on and off for about two years, and had lost a considerable amount of flesh during that time.

On examination she was a spare, anæmic looking woman. On palpation of the left lumbar region of the abdomen a hard lump about the size of a duck's egg was felt. It was slightly movable, not tender on compression. She stated that she had felt the lump there for some months, but it never increased in size.

The urine contained albumin and a small deposit of pus on standing.

Renal tumour, possibly calculus, was diagnosed, and on 17th September, 1898, I opened the right loin and exposed the kidney, when I found it very hard to the touch. On opening into the organ, it was found to contain the stone I now show you, weighing 676 grains. The kidney tissue had to be stripped off the stone in order to free it for removal. There was free bleeding, which was, however, controlled by pressure. A tube was left in the pelvis of the kidney, and the wound dressed. In thirty-six hours the tube was removed, and the patient made a practically uneventful recovery, being discharged from the hospital within three weeks of the operation.

To me these cases have been most instructive. In no one instance were all the orthodox symptoms of renal calculus present.

In no single case could I obtain any history of hematuria, which shows at least that even if present, it was not in such quantity as to attract the attention our text books would lead us to expect.

With regard to case No. 3, it is curious that little or no pus was present at any time in the urine when I examined it, and in cases 1 and 4 it was only occasionally present. In cases 2 and 4 (the large calculi) we find many of the usual symptoms we are told to look for were not present.

As regards the operation itself, there are several points I would like to lay stress on.

First, the question of lumbar as against abdominal or abdomino-lumbar methods.

Well, gentlemen, while I do not fear the

peritoneum I respect it, and, seeing we can freely and easily expose and explore the whole kidney through the loin, I fail to see any just reason for adding the dangers of abdominal section to the already sufficiently numerous ones of a lumbar nephrotomy.

As regards the incision, I always make it midway between the last rib and the iliac crest, freely enlarging it in an upward or downward direction, or in both directions if necessary. A large incision gives plenty of room for the required manipulations, some of them being of a delicate nature, and I need hardly remind you that a ten-inch incision heals when sutured quite as quickly as a one-inch one.

The chief dangers of the operation undoubtedly are present after the organ has been exposed. Personally, I always make a careful dissection through the peri-renal fat, down to the capsule of the kidney, and then thoroughly free it before drawing it up into the wound. As regards opening into the kidney, if a soft fluctuating spot presents itself in the kidney tissue I pass a fine-pointed sinus forceps into it and tear through the substance of the organ sufficiently to admit the finger. If no soft spot be present I believe that an incision along the posterior border down to the calyces is the safest method. An opening into the pelvis direct always, to my mind, involves the danger of wounding the larger vessels supplying the kidney; a danger more real than some surgeons would have us suppose.

Lastly, the removal of the stone; Mr. Henry Morris would have us believe that this is usually a simple matter. He says, "the over-laying part of the kidney should be cut into, then with a scooping movement of the finger introduced into the incision, the stone can be raised to the surface of the wound on the point of the finger." Well, gentlemen, I can only say that I find the removal of the calculus usually the most troublesome part of the operation, and I believe that the most satisfactory instrument is a long-forceps shaped like a sinus forceps, with broad-ended blades. Such a one is being manufactured for me, and on its arrival I shall be glad to submit it for your opinions.

Again, I would like to express my opinion that in many cases of obscure loin pains, exploration of the kidney, not in itself a dangerous procedure in the hands of a competent surgeon, might be more often advocated and practised.

And, in conclusion, regarding the mortality in this series one in four I would like to point out that the worn-out and feeble condition of the patient made the result most precarious, as

the patient was *in extremis* when I was called in, and, in any case, could not have survived many weeks. Had she only have come under treatment earlier in her trouble she would undoubtedly, in my opinion, have completed a successful record. But so long as a grandmotherly legislature encourages quackery and imposture so long will the suffering poor be robbed of not only their hard-earned savings, but also of their lives.

PELVIC HYDATID REMOVED BY PERINEAL INCISION.

By JOS. C. VERCO, M.D. LOND., F.R.C.S., ENG.,
ADELAIDE.

J. H., aged 41, engine-driver, was seen on 14th May, 1898. He had suffered for about three weeks with pain inside the left iliac bone. It came on when he wanted to have his bowels moved, and as soon as they acted it disappeared, until the need arose for another motion. The day before I saw him the pain became continuous, and extended at times into the left groin, and occasionally into the testis. Besides the constant pain, he had very severe paroxysms. His bowels had been moved on that day three times, the stools being loose and containing much mucus, but no blood. Micturition was painless, but somewhat unusually frequent. Temperature, 101° F.

On examination, there was found a lump in the hypogastrium, rising not quite three fingers' breadth above the symphysis. It lay to the left of the middle line, extending outwards to just beyond the pubic spine. On deep pressure it could be felt as far out as the middle of Poupart's ligament. It just transgressed the middle line to the right. *Per rectum* a spherical mass was palpable in the upper part of the pelvis, occupying its left front, projecting into the bowel, and at one part pointing, as though about to burst into it. The attachment to the outer and front part of the pelvic wall was at a much higher level than the free part of the cyst.

He was given a mixture of morphia and solution of acetate of ammonia every four hours, and kept in bed for three days. He had some paroxysms of pain the first night of about ten minutes duration, and extending to the knee. His temperature on the 15th was 99°, and normal on the 16th. On the 17th he was allowed to be up as his pain had all gone and his bowels were quiet.

On the 19th, at the private hospital in Wakefield Street, ether was given by Dr. W.

A. Verco, and Dr. Marten kindly assisted me. The patient was placed in the lithotomy position, with Clover's crutch applied. A silver catheter was passed into the bladder and entered easily, but with distinct deviation of the point to the patient's right. A large hypodermic needle was introduced into the tumour where it projected into the bowel so as to determine its nature, and a drachm or so of hydatid fluid was withdrawn. An incision was made in the left side of the perineum, exactly as in left lateral lithotomy except that anteriorly the knife was entered about half an inch from the median raphe. The back part of the triangular ligament was notched and a couple of insignificant vessels divided, and then with the finger and the handle of the scalpel, in the ischio rectal fossa, it was easy to work up to the cyst, which was exposed at about the finger's depth and could be seen white and glistening. The levator ani was not divided; the parasite apparently in its growth pushed the front edge of this backwards. The tumour was incised, and the single mother cyst without any daughter cysts was easily withdrawn. Owing to the complete collapse of the adventitious sac and some retraction upwards, slight difficulty was experienced in the introduction of the drainage tube, but a large one was placed and stitched to the skin.

The patient had no distress except having to lie in bed when he felt so well. But, a few days after I removed the drainage tube, he had an elevation of temperature, and I had to introduce it again owing to suppuration of the sac. This was worn for some time after he was walking about, and soon all discharge ceased, the track completely healed, and on examination by the bowel only a little thickening remained to indicate the site of his parasite, which had been about as large as the two fists.

The operation was very easy. The urethra was not seen or felt during its course, nor was the rectum at any time in danger of injury. The reasons which led me to attack the parasite from below instead of from above were these. It rose so little above the symphysis that very little room was allowed for a laparotomy without getting into the peritoneal cavity. The incision would have been through the stout tendon of origin of the rectus, would have been awkwardly near the bladder on one side and the cord on the other. In case of suppuration of the sac, the tube would be at the highest point, and so drainage would have been inefficient. The cyst seemed more readily and safely to be reached through

the perineum, and though the proximity of the incision to the anus rendered it specially liable to septic infection, yet in case of suppuration the drainage would be from the lowest part of the sac. The result has justified the means employed, and for a certain small proportion of cases this incision will be our best method of attack.

A REMARKABLE CASE OF FATAL HEAD INJURY.

By JOHN MACPHERSON, M.A., B.Sc., M.B.,
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ALFRED HOSPITAL.

On the evening of July 3rd, during a panic following a tram accident in Newtown, and in which the passengers jumped wildly from the cars, several of them fell and sustained injuries of greater or less severity. One of these was conveyed to the hospital in a cab. She was a woman 43 years of age. On arriving at the hospital she was perfectly conscious, expressed her ability to walk, and was taken to the casualty room shortly before eight o'clock. She was examined, and found to have two small, superficial, lacerated wounds over the back of the occiput, not extending as deep as the periosteum. There was remarkably little external hæmorrhage from the wounds, and no bleeding either from the ears or nose. No fracture could be felt. The pupils were equal and active, and the pulse small.

The patient wished to return to her home, furnished the attendant with details regarding her name, address, age, etc., and complained that the sutures applied to the wounds pained her. She also paid the cab fare, and asked that her family should be informed of her accident. The injuries were seemingly trifling, and although she asked what had happened, where she was, and how she had got there, her manner was suggestive of emotionalism rather than urgent cerebral lesion.

She was conveyed to the wards, where she complained of headache, and vomited somewhat. The temperature was 97.4° F., pulse 88, and respiration 24. Shortly before midnight the pulse rapidly failed, and she died quite suddenly.

At the autopsy, conducted by Dr. Taylor, Government Pathologist, we found a considerable effusion of blood beneath the scalp on the back of the head, and extending amidst the fibres of the right temporal muscle. A fracture of the skull was seen, involving the occipital bone in the neighbourhood of the inion, and

directed to the right almost to the petrous temporal bone. Within the skull were large extravasations, extradural on the right side and subdural on the left. The cerebral arteries were highly atheromatous, and there was a slight rupture of the left middle cerebral, with a small coagulum upon the vessel at the site of the rupture. The orbital surfaces of the frontal lobes were contused, and the right temporo-sphenoidal conspicuously lacerated. In the thorax the lungs were healthy, without marked cedema of their bases; the left heart was somewhat hypertrophied and the mitral valves slightly thickened. In the abdomen the kidneys were in an advanced condition of chronic interstitial nephritis—the right presented a small recent contusion without any corresponding external mark of violence. The bladder was distended, otherwise the remaining abdominal viscera displayed no gross lesion.

The interest attaching to this case lies in the comparative absence of symptoms in spite of the remarkable severity of the lesions, and the rapid and altogether unexpected dissolution. As a coincidence, the other two patients injured in the same calamity sustained wounds in almost identically the same position—the one a hæmatoma, and the other a lacerated wound over the back of the occiput.

NOTE ON A CASE OF RADICAL CURE OF FEMORAL HERNIA.

By T. HOPE LEWIS, M.R.C.S. ENG., AUCK-
LAND, NEW ZEALAND.

THE interest of this case lies in the fact that during the operation of radical cure of femoral hernia, a large portion of the urinary bladder presented with the sac of the hernia. J. F., æt. 62, baker, had double femoral hernia, small on the right side, very large on the left. The right side was not operated on. The left hernia had existed 41 years, and about a month ago was mildly strangulated, but was reduced by simple taxis. Operation for radical cure was advised and accepted. When endeavouring to provide a sample of urine for pre-operative examination, I noticed patient had much difficulty in passing urine, but after kneading the hernial mass sufficient was passed for my purpose.

I remarked on this manipulation to the patient, who said he always had to do that when he wanted to pass urine. Next day the usual incision was made for the radical cure of femoral hernia, and the sac separated and made apparent. It was opened, and my finger

passed into the abdominal cavity. Still there seemed to be another sac, independent of the one my finger was in. The tissues of forty-one years duration, I need not say, were very tough and thickened. I was not accustomed to two hernia sacs in the femoral ring, large as it was, so careful dissection was made on the second one. Muscular fibres soon showed up, and the second tumour (half the size of a man's fist) was found to be the urinary bladder. It was separated from its adhesions and the true hernial sac, and returned to the pelvis. The operation was completed as usual. He can pass urine now comfortably without assistance by kneading.

A CASE OF HYPERTROPHY OF THE THYMUS GLAND, CAUSING FATAL PRESSURE SYMPTOMS.

By G. P. DIXON, M.B., B.CH., SYD., BRISBANE (Q.), RESIDENT SURGEON CHILDREN'S HOSPITAL.

J. G., *æt.* six years, was admitted on August 9th, at 6 p.m., to the Children's Hospital. The following history was supplied by his relatives:

The child was apparently in his usual health when he went to bed the night before. He vomited several times during the night, complained of nausea in the morning, but got up and walked about. About 2 p.m. the same day he suddenly became unconscious from some unknown cause, and remained in that condition until his admission to the hospital. There was no history of convulsions, rash, etc., but the relatives state that the child was habitually short-winded on exertion, and often got blue in the face. He had suffered for years from a short cough.

Condition on admission.—Temperature 103°, pulse 164, respiration 60. Extremely cyanosed, no stridor, no recession of intercostal spaces; heart beating tumultuously and very strongly, but radial pulses were weak; finger tips quite blue, not clubbed; face and lips dusky; perspiring freely. The patient was in a condition of stupor, could not be roused, his reflexes were present; no paralysis or rigidity. Pupils were dilated, and equal; radial pulses synchronous, but the left was weaker than the other. There was a short, frequent, husky cough.

Chest.—Heart's impulse very diffuse. Pulsation could be seen over the auricular areas, as well as in the epigastrium and internal to nipple. No palpable thrill. The first sound was muffled, but no murmur could be heard over either apex or base; second sound normal.

The cardiac dulness was increased in all directions, and continuous with an area of impaired resonance over the manubrium sterni and left apex. Over this area the breath sounds were weak, but there were no accompaniments or bronchial breathing.

Behind.—Breath sounds normal; no dulness. A loud systolic blowing bruit could be heard all over the left chest behind. It was not noticeable in front.

The patient was given strychnine hypodermically, and inhalations of oxygen, and improved slightly in colour. He became partially conscious, and could move his limbs; resented percussion over the precordia; did not speak.

About six hours after admission he suddenly became livid, and heart stopped.

Post-mortem.—All the internal organs were deeply congested; no hæmorrhages. The lungs, brain, and abdominal viscera were quite healthy.

Heart.—All the cavities were distended with dark blood clots. A little colourless fibrin was present in the right auricle. There was no evidence of valvular mischief, and the aortic valves were competent.

In the thymus region was a lobulated mass, having the naked eye appearance of thymus tissue, and extending from the root of the neck to the front of the pericardium, to which it was attached. This mass completely filled the superior mediastinum and exerted pressure upon the arch of the aorta and other vessels. There was no evidence of pressure atrophy, or other disease of aorta, pulmonary artery, or trachea.

THE PATHOGENESIS AND TREATMENT OF PUERPERAL ECLAMPSIA, WITH CASES.

By G. GORDON STUART, L.R.C.P. AND S.E., ETC., CASTRA, TASMANIA.

READ TO THE LAUNCESTON SUB-BRANCH BRITISH MEDICAL ASSOCIATION, OCTOBER 24TH, 1898

THERE is, in the whole range of our experience as obstetricians no complication more grave than eclampsia, and none whose etiology is surrounded by greater obscurity.

I am indebted chiefly to the recent monograph of Dr. Chenisse Wright's paper in last year's American "Journal of Obstetrics," Ludwig and Savor's "Experimental Studies on the Pathogenesis of Puerperal Eclampsia," and Pilliet on the "Liver of Eclampsia." It would be tedious to mention periodical literature bearing on the subject.

The word obscurity is applicable to our knowledge of the etiology of puerperal

eclampsia to-day, though it is not so long ago since the teaching on this point was definite enough, and the theories then popular might be summed up under two heads:—*Nervous*, which sought the primary lesion in an alteration in and around the nervous centres; and *Renal* or *Uræmic*, which ascribed all the phenomena to piling up in the blood of effete and toxic products normally eliminated by the kidneys—the first set of theories having its origin with Sauvages over a century ago, and the latter with Lever, of Guy's, who in 1843 first asserted constant coincidence of albuminuria and pregnancy in eclampsia.

One or other of these theories until recently held the field, and each has a substantial substratum of fact. Besides the actual convulsions during life, the post-mortem appearances include profound alterations of the nervous centres—cerebral œdema, with cerebral hyperæmia, or, on the contrary, anæmia, dropsy of the ventricles, hæmorrhagic lesions of the brain, and, as shown by Yagodinsky, the presence of degenerated and even necrosed nerve cells in the cerebral cortex and basal ganglia.

The uræmic origin of the malady, in like manner, is supported by the appearance of those symptoms during life with which we are all familiar, and which constitute generally our first danger-signal—œdema, amounting often to general anasarca, and albuminuria, with, post-mortem, the morbid appearances of the kidneys.

The presence of albumin in the urine was often stated as a first postulate of the condition, although so long ago as 1866 Brummerstadt had reported a series of 135 cases of eclampsia, of whom only 106 had albuminuria. More recently Charpentier, of Paris, published a list of 141 cases of eclampsia without albuminuria, Schauta one of 125 with 18 non-albuminurics, and Pavpertof, of Moscow, one of 288, with 114 non-albuminurics. The presence of albumin in the urine, then, is non-essential.

Finally, I ought to mention in this connection recent researches regarding the actual condition of the kidneys—notably those of Prutz. From 22 *post-mortems* his conclusions are that only in eight were the kidney lesions sufficient to cause uræmic accidents; that there is no correspondence in intensity between these lesions and the symptoms actually observed during life—on the one hand he noted profound renal lesions in slight cases of eclampsia, and on the other the most grave symptoms, while the renal alterations were insignificant or absent.

These time-honoured theories, then, will not account for the phenomena, and I propose now

to briefly refer to those which contest the field with them.

First, there is the rather startling question as to whether eclampsia does not owe its origin to a specific microbe—an origin by no means improbable in these days, and a theory which better than any other would explain the phenomena, and supported by the kind of epidemicity we observe in its occurrence, an epidemicity noticed so long ago as 1825 by the great "sage-femme," Madame Lachapelle, and which has probably struck us in our own obstetric practice.

In this connection multitudes of observers have worked, notably Hergott, Favre, and Jurgens, without definite success. Gerdes found a bacillus in the blood, kidneys, and spleen which he isolated by cultures and injected into white mice, rats, pigeons, rabbits, and guinea-pigs—the white mice developing phenomena of intoxication. But Gerdes began his investigations from fourteen to twenty-three hours after death, and there seems only too good reason for believing that many of these bacilli are the ordinary "*proteus vulgaris*" and kindred forms.

In a word, the microbial origin of eclampsia is far from being proved.

Nextly, and closely allied to the uræmic theory, is that of *auto-intoxication*, differing from the uræmic theory in that it accuses *all* the organs of elimination, especially the liver and kidneys of complicity in the condition, and would ascribe the condition to—on the one hand—the continual manufacture of toxins, which is a normal process in the system, increased by pregnancy, and—on the other—their deficient elimination.

Two great facts tend to support this view: Firstly, that, as shown by Bouchard, in eclampsia the urine, though often scanty, is deficient in toxic properties, while the blood serum acquires a toxicity far in excess of the normal.

Ludwig and Savor have given the results of investigation in sixteen cases as to the relative toxicity of the urine and blood, finding that the toxicity of the urine is invariably below that of non-eclamptic pregnant women during the convulsive period, while the toxicity of the blood serum is at least fifty times as great.

Davis illustrates this well in two cases related by him in the American "Journal of Obstetrics" recently. On the first patient's admission the urea was 1.13 per cent., after several hours of convulsions 0.5 per cent., and forty-eight hours after delivery 2.14 per cent. In the second case, during the convulsive period the amount of urea was 0.51 per cent.

To return to Ludwig and Savor, they base on their investigations their theory that pregnancy is a pre-disposing cause to auto-intoxication, the blood serum is hypertoxic, and when this toxicity reaches its limit, eclampsia results. There are many grave objections to this hypothesis; it does not show what poisons determine the auto-intoxication, nor their special results; it does not show that the condition is an auto- and not a hetero-intoxication; and it ascribes all the phenomena to failure of the organs of elimination caused by pregnancy, whereas, as we know, very many women are never so well as when in that condition.

But these theories which we are now considering, and which assert that the cause of puerperal eclampsia is carried by the blood stream itself, and is not to be found in the changes met with in any one organ, have, nevertheless, been greatly based on the long unobserved or neglected changes of one organ above the others—the liver—and it is to Pilliet we owe the description of these morbid changes in the first place.

He describes three degrees of this. In the first a special dilatation of the intra-lobular capillaries in the neighbourhood of the portal fissure. In the second and more frequent degree the follicles are enlarged, with a periphery formed of dilated vessels, and a centre of degenerated elements—liver cells, blood corpuscles, broken down capillaries, etc.

The third stage is practically one of infarction and necrosis. The areas extend, coalesce by the death of the parenchymatous tissue between them, and so produce large sequestra.

There are, moreover, hæmorrhagic lesions of the liver, whence the emboli which are found in other organs, and are of hepatic origin, would proceed.

I shall have to refer presently to the observations of Schmorl, of Leipsic, in this connection, meantime we may state that the liver is the seat of a characteristic morbid condition proper to this disease alone.

To-day we know the importance of the liver's eliminatory action on poisons and the transformation of albuminoids into urea, and coupled with the notable diminution of the urea in eclampsia, this has given rise to the various theories of auto-intoxication, and these fail to explain the why and wherefore of the condition. The difficulty lies here—if the lesions of the eliminatory organs, liver, spleen, and kidneys are primary, and explain the auto-intoxication, we cannot invoke the auto-intoxication to account in its turn for the organic lesions; and

we are driven further afield to look for the underlying cause.

Lusk and others believe that the toxæmia is due to products derived from the intestine, though it is difficult to see why intestinal chemical changes should determine in pregnancy so special a condition as eclampsia.

Schmorl, of Leipsic, bases his theory on seventeen *post-mortems*, in all of which he found extensive lesions of the liver—sometimes anæmic, sometimes hæmorrhagic, always tending to death of the parenchymatous tissue, and numerous thromboses in the veins and capillaries around the necrosed patches. He found extensive thrombosis in the arteries and capillaries of the lungs, the thrombi containing giant cells, which he believes to be placental in origin, as he found them free among the placental villi, and in the veins of the uterine wall.

He ascribes a similar origin to the lesions of the brain, kidneys, and other organs—everywhere a process of thrombosis, hæmorrhage, and necrosis, and he believes eclampsia to be due to a coagulating substance in the maternal blood of placental origin.

Time will only permit me to indicate the many observations of other men in connection with Schmorl's theory, notably Volhard and Kollman, the former having shown that the urine, after an eclamptic convulsion, causes thrombosis in rabbits, and the latter that the blood of eclamptics is much more rich than the normal in globulins—fibrino-plastic matters, in fact.

Finally there is that view to be considered, though by no means capable of very definite statement, which tends to hold the field to-day, and in attributing a share in its causation to the fœtus, helps to explain why eclampsia is the peculiar property of pregnancy and the puerperal state. It is this—that eclampsia is a toxæmia (for what do the diminution of urea, and the hypertoxicity of the blood mean?—that toxic products exist in the economy which are not being eliminated), that eclampsia is a toxæmia, and that the fœtal organism is concerned in the production of the toxic substance which causes it.

We have the high authority of Chambrelent, Schmorl, and Vicarelli for stating that the fœtal lesions are identical with the maternal, and Chambrelent relates one observation where the fœtal blood was more toxic than the maternal.

This implication of the fœtus helps to explain why, for instance, the death of the fœtus so often brings in its train an ameliora-

tion in the mother's condition, such as we often see in practice.

Nor is it the mechanical presence of the fœtus in utero which causes it. Else how explain those causes arising in the lying-in period? Renal and hepatic insufficiency, and all the attendant train of morbid conditions once realized, there is no longer an absolute necessity for the presence of the fœtus in order that eclampsia should arise—comparatively slight causes may give rise to it.

It is, therefore, sufficiently clear that the etiology of eclampsia is still obscure, but if that is so, the morbid conditions are abundantly clear, and it is from these we get our best indications for treatment.

I now propose to refer to some recent cases of puerperal eclampsia in my experience, in some detail, which it seems to me will serve a better purpose than a short record of a greater number.

The first is that of Mrs. S., of Ulverstone, Tasmania, a primipara, aged 18 years, whom I saw first on the 9th November, 1897, in the eighth month of her pregnancy, the symptom calling for the attention of friends being the enormous dropsy—which affected the legs, vulva, face, and even the arms and hands. The urine was of specific gravity 1,018, acid, albuminous, with granular and hyaline casts.

To prepare for eclampsia, complete rest in bed was ordered, on milk diet, with free laxation of the bowels by pulv. jalapæ co. and calomel, a wet hot pack followed by a dry pack twice a day, and medicinally tincture of the perchloride of iron ℥ 15, and solution of acetate of ammonia ℥vi. every four hours.

This treatment was kept up till the 11th November (two days), when she was seized with eclamptic convulsions. I was absent in the country, and did not see her until three hours after (7 p.m.), when she was having convulsions about every ten to fifteen minutes.

She was put under chloroform, and 9 oz. of blood drawn from the median basilic vein, after which 10 grs. chloral hydrate and 15 grs. potassium bromide were injected hypodermically—the reason for hypodermic and not rectal administration being to leave the rectum free for an injection of saline solution, 2½ pints of which was thereupon given.

The os was, on first examination, rather less than a shilling piece in size. It was dilated digitally and by Barnes' bags, and was very slow in dilating, partly owing to rigidity and, probably too, to my being alone with the case, and having all the other details to carry out.

The hypodermic of chloral and bromide was

repeated at 10 p.m., and thereafter two pints of saline solution were injected into the rectum.

The convulsions were now becoming distinctly rarer.

When the os was well dilated I turned the child and delivered, and a quarter of an hour afterwards expressed the placenta, at 2.10 a.m.

On first arrival the convulsions were about every ten minutes, there being too much to do to time the interval. After the first hour and a half they were at 8.30, 9.30, 11.10, 1.10, 3.40, and the last at 5.45.

She remained completely unconscious during the following forenoon, and there was complete anuria, for which I gave—

Caffein Cit., gr. iii.

Pot. Cit., gr. xx.

Tinc. Digitalis, ℥ x.

Liq. Ammon. Acet., 3 vi.

every four hours. The diet was exclusively milk and soda water. She was douched with perchloride (1 to 1,000) every six hours. The temperature remained normal till 9 p.m., when it was 99.2°. Passed urine twice during afternoon, in all eight ounces.

Next morning (Sunday) the temperature was 104.2°. Feet and legs more swollen. Ten ounces urine during night. Hot wet pack, followed by dry pack, after which the temperature fell to 101.4°. Urine three times during day, in all twenty ounces. Had spoken in answer to questions, and complained of uterine pain. Gave intra-uterine perchloride douche and turpentine stupes externally. Temperature, midnight, 102.4°.

From this time the progress was not seriously interrupted. Under the influence of the diuretic treatment, the urine became abundant. She complained of tingling in the limbs, and headache, and for some time of pain in the eyes and photophobia. The dropsy finally disappeared after nine weeks, and she had then no albuminuria.

Case II.—Mrs. A.—n, primipara, aged 23, nearly at term, saw her first 2nd July, 1898. There was general anasarca, urine sp. gr. 1,006, acid, abundant albumin.

The prophylactic treatment consisted in milk diet, rest in bed, laxation of the bowels, and iron and acetate of ammonia internally.

Two days after, I was sent for as she was in labour. She complained of headache, and was heavy and stupid, but there were no convulsions.

On examination, a head was found in the normal position, approaching the bony outlet, and a second child made out. I gave by the mouth chloral hydrate 15 grains, and potassium bromide 30 grains.

The first child was born at half-past six. A few minutes later she said it was dark, and she could not see the child, which had been placed beside her.

Regarding this amblyopia as a danger-signal, I put her under chloroform, turned and delivered the second child, immediately after which she had her first convulsion, marked by a very short tonic, and violent clonic stage.

After delivering the placenta, I injected two pints of warm saline solution into the lower bowel, which was very intolerant, and I therefore exposed the median basilic vein, and injected $1\frac{1}{2}$ pints of saline solution.

After a time the convulsions became rarer, she remaining completely comatose in the intervals. The chloral and bromide was repeated at 10 o'clock, after which she had four more convulsions, when they ceased.

On the following morning she was still unconscious, pupils dilated and did not react to light. No urine passed. Drew off five ounces by catheter. Prescribed similar diuretic mixture to former case, and perchloride douche every six hours, and rectal nutrient enemata of salinated milk.

Next morning she was still semi-comatose. Temperature 101.4° . Very restless. Had passed over half-a-pint of urine. During the afternoon answered questions, and had sensation of touch. On the day following, she could perceive light for the first time, and talk intelligibly. From this time her recovery was continuous. She could count fingers held up two days after perception of light. There is now no albuminuria, but she complained for some time of pain in the eyes and photophobia.

I shall now briefly refer to the first case, in which I used rectal irrigation—that of a primipara, aged 21, whom I attended in 1895. When I saw her she was having convulsions every quarter of an hour, comatose in the intervals, with complete suppression of urine, which had lasted eighteen hours. Having got the assistance of a colleague we bled her, and at intervals of four hours gave a warm injection of water, without salt, however, into the bowel, each lasting about half an hour. The convulsions ceased at the end of sixteen hours, and sensation had partially returned. At the end of thirty-six hours she was conscious, and delivery took place on the third day. This I intended to induce by catheterization of the uterus, but my bougie ruptured the membranes in being passed. She made a good recovery.

Finally, I should like to mention two recent cases in the practice of my colleague, Dr. McCall.

The first, in December, 1897, was a three-para, who was seized fifty hours after labour with convulsions, almost continuous, and exceedingly severe, a remarkable condition in post-partum eclampsia. The convulsions lasted from 4 a.m. till 12 midnight, when she died. The treatment carried out by Dr. McCall, with Dr. Gregory Sprott in consultation, consisted in subcutaneous saline injections, and medicinally chloroform, chloral, and pilocarpine.

The case was a midwife's one, and I think the result may be ascribed in part at least to the absence of preliminary treatment.

The second is that of a primipara, aged 25, at term, attended by Dr. McCall on July 11th, 1898. She had had swelling of the feet for four months, and of face for three months. On the 11th she complained of pain in the eyes, facial neuralgia, and headache. Next morning at 7 o'clock she had her first convulsion, and they continued at increasing intervals for thirty hours. She gave birth to twins on the evening of the 12th, and recovered consciousness on the following morning, when she was discovered to have complete amblyopia, which lasted two days, from which time her sight was gradually recovered.

The treatment consisted in saline injections per rectum, chloral hydrate and potassium bromide per rectum, and chloroform.

She has made a good recovery.

In offering a few concluding observations on treatment, I shall first address myself to the question of albuminuria in pregnancy.

Now, although the most recent statistics (those of Charles, this year) show that of four albuminurics only one develops eclampsia, and although, on the other hand, not every eclamptic exhibits albuminuria, the complications are so many and so grave that it demands vigorous treatment.

Of 110 cases of albuminuria in pregnant women—without eclampsia—8 women and 20 children died. there were 61 premature labours, 8 post-partum hæmorrhages, 3 cases of threatened convulsions, and moreover, comâ, dyspnœa, or paralysis may prove fatal without eclampsia.

It is, therefore, essential that albuminuria should be looked for and treated in all pregnant women.

No good purpose would be served by dogmatizing on the details of treatment, but it seems to me that too much stress cannot be laid on certain principles which should underly it, founded on its etiology, and they are these:—

1. Both before and after convulsions the excretion of urea is notably deficient, and the liver, the great seat of the metabolism of albu-

minoids, is seriously compromised—therefore, complete rest to control the tissue, waste and consequent production of urea, free action of the skin and kidneys, and an exclusive milk diet.

2. The blood serum is hypertoxic, therefore dilute it, as by saline injection and large draughts of water, or withdraw it, as by bleeding and purgation.

3. The central nervous system is involved in the pathological changes, therefore our treatment must be directed to the control of the nervous phenomena, and

4. Considering that pathology renders it at least probable that the foetus is largely concerned in the production of puerperal eclampsia; that its removal from the uterus is so generally followed by amelioration or disappearance of the symptoms; the slight chance of saving the foetus, the great tendency to premature labour, and the high mortality of the disease; that, although strongly deprecated by many authorities, the induction of labour is the course to be adopted in the large majority of cases.

NOTES ON A CASE OF TYPHOID FEVER, COMPLICATED BY HÆMORRHAGE AND COLLAPSE, TREATED BY TRANSFUSION OF NORMAL SALINE SOLUTION. RECOVERY.

BY F. J. DRAKE, M.A., M.B., B CH. MELB.,
HOBART.

A.S., age 31, was first seen on the 4th June, and was found to be suffering from an apparently mild attack of typhoid fever. Temperature was 103° F. in the morning, and 103·6° in the evening. During the next ten days the temperature took a lower range, the highest recorded being 103° F. on the 13th of June. During the previous few days the temperature had remitted well after sponging. The patient's general condition had been very good, and gave no cause for anxiety. The pulse had never gone over 100 except on one day—the 6th—when it had reached 110 in the morning and 100 in the evening. It had been always of good volume. On the morning of the 14th, ten days after going to bed, the temperature touched 103·6°, but dropped during the day to 101·4, 100, 101·6°. During this same evening I received word that hæmorrhage had occurred, and on visiting the patient the pulse was 85, fair volume, lips good colour, abdomen natural in appearance, temperature 101° and 100° alter on. The quantity of

nourishment was reduced and given in smaller quantities and at shorter intervals, the milk being peptonised, ergot and opium being given by the mouth and preceded by an injection of morphia. The ice bag was applied to the right iliac fossa, and all nourishment given iced. Small portions of ice were given to suck from time to time.

The temperature the next morning was 99° F., and the patient appeared to be comfortable. The same treatment was continued, and the patient disturbed as little as possible.

The temperature the same afternoon rose to 101°, but at 8.45 p.m. had dropped to 96°, and was followed by a very copious hæmorrhage, followed by marked collapse. The patient was bathed in a profuse sweat, the pulse very feeble, with sighing respiration, coldness of the hands and legs as far as the knees. He appeared to be in imminent danger of dying of collapse. Stimulants in the form of brandy and coffee were given every few minutes, with injections of liquor strychniæ and atropine to control the sweating. The next morning his condition was still worse. The pulse was almost imperceptible, the nurse making it 180; I could not count it. He appeared to have only a few minutes to live. He was still bathed in profuse cold perspiration, and breathing was extremely shallow. Temperature refused to register above 96° F.

Transfusion of saline solution was then decided on as a last resource. Before giving the saline solution an injection of liquor strychniæ 7M and $\frac{1}{160}$ gr. atropine was given hypodermically. The median basilic vein was exposed, cocaine being used as the local anæsthetic, strict antiseptic precautions taken, and four pints of saline solution were steadily introduced. The face during the injection began to assume a rosy hue, the colour of the lips especially improving, breathing became deeper, and the pulse could be felt to pulsate more slowly and fuller, until the number of beats fell to 108 per minute at the end of the operation, when I judged that he had sufficient. The vein was then ligatured and divided, and the wound closed with a horsehair suture. This was done at 8.45 a.m. At 10.45 the same morning a severe rigor occurred, and the same afternoon temperature rose to 104·6° F., pulse 118.

He still kept a better colour, but was still perspiring freely. A second injection of atropine $\frac{1}{160}$ gr. was given hypodermically, which somewhat checked the sweating. The limbs kept much warmer, and were wrapped in cotton wool.

The next morning there had been a good remission in the temperature, it having fallen to 101.4° F., pulse 120. General condition was a little better. The same evening the temperature again rose, the highest point reached being 105.6° F., pulse 120.

He was then being fed on Brand's essence of beef, beef-juice, brandy 8 to 10 ozs., and kept on a mixture of turpentine ℥ x, digitalis ℥ v., and opium tincture ℥ vii. every three hours, with occasional half doses when he appeared to be very drowsy or the pupils markedly contracted. Temperature dropped the next day to 102° F. and 101.4° F., with coincident improvement in pulse and respiration, and he steadily and uninterruptedly convalesced, and is now quite well, the disease happily leaving no sequelæ.

CASE OF TYPHOID FEVER WITH HÆMORRHAGE, IN WHICH INTRAVENOUS INJECTION OF NORMAL SALINE SOLUTION WAS USED.—RECOVERY.

By CHAS. J. RAMSAY, M.B., B.CH. MELB.,
SURGEON-SUPERINTENDENT LAUNCESTON
HOSPITAL.

C.D., male, *æt.* 46, was admitted to the Launceston Hospital on April 30th, 1898, with a fortnight's history of typhoid symptoms. Temperature 104.4°, pulse 96 dicrotic, abdomen distended, diarrhœa, and other symptoms of a severe attack. He continued in much the same condition till May 2nd, when he had about eight ounces dark hæmorrhage from the bowel, and pulse became weaker. He was put on the usual treatment, opium and ergot being given internally. Next day he had two hæmorrhages, about ten ounces in all, became much weaker, with cold, clammy skin. It was necessary to give him stimulants—brandy (3 ozs.), strychnia, and digitalis—owing to the seriousness of his condition.

On the day following (May 4th) he was much worse, sighing, restless, hands, face, and ears livid, hiccoughing, vomiting frequently, increase of the abdominal distension, lying in almost unconscious condition, with eyes half closed. Pulse extremely feeble, at times almost imperceptible, but still slow (76-88) and he had another small hæmorrhage, about three ounces.

I suggested to Dr. McArthur to transfuse him, as he seemed in a moribund condition, and none of the stimulant seemed to have more than a very temporary effect. This he did at

5 p.m. (May 4th) injecting two pints of normal saline solution into the median cephalic vein, and an improvement in pulse and appearance followed, pulse rate being about 80, but better in volume and tension. The good effect only lasted about two or three hours, when he drifted into his old condition again, and the prognosis became most unfavourable.

However, we decided to try the injection again, and at 9.15 p.m. (four hours after the first) one and a half pints were injected. Again the pulse, respiration, and general appearance improved. The next day there was another hæmorrhage, about seven ounces, but after this he became much brighter, his pulse continuing to improve, brandy, strychnia, digitalis, peptonoids being continued for some weeks when necessary. After this, though it was three weeks before the febrile state subsided, his condition was never alarming.

A relapse set in on the 18th day normal, and ran a 10 days' course. After this he slowly convalesced, and is now quite well, although not so strong as formerly.

NOTES ON THE TREATMENT OF DIPHTHERIA.

By THOS. WYLD PAIRMAN, L.R.C.P. & S., EDIN.,
CHRISTCHURCH, N.Z.

THE present paper is introduced more with a view to promote discussion than to ventilate my own opinions; and though objection might be taken to the arbitrary style of expression, I do not wish to imply that some of my dicta are not open to question, nor have I any desire to obtrude the personal equation in the matter. The notes are the outcome of a considerable practical experience extending over a number of years, and recorded without any claim to originality. Most of us develop a train of reasoning on which we base the elements of our treatment, and unconsciously we come to attach undue importance to our own method. If the discussion stimulates a different train of thought the paper will have served its purpose. In my treatment of diphtheria I keep the following things in view:—

1. Rest.—It is essential, even in comparatively mild cases, to remember the necessity of rest, not only as conducive to present cure, but as limiting the severity of the sequelæ. Since the routine use of gargles has been discontinued the number of cases of pharyngeal paralysis has been materially lessened. Adopting this fact as an object lesson, it behoves us to insist on rest, taken in its very widest sense. If local

medication be adopted, the application should be as unirritating as the exigencies of the case demand. Much will depend on the temper of the child for our choice of methods; some children, for instance, permitting the attendant to paint the throat without a murmur, while others resist obstinately any such attempt. Such resistance has a twofold evil result. By inducing strong inspiratory efforts, the disease is liable to be drawn into the larynx, and so complicating matters, and the child is put into a highly excited and nervous condition, which is inimical to successful treatment, and may induce serious sequelæ. Even in convalescence this principle of rest must not be overlooked. Paralysis in its various forms is best avoided by inaction. Children sent too early to school often suffer from eye-strain, loss of accommodation, etc., and intermittent pulse frequently results from early and undue exertion. At least one month's careful surveillance is demanded.

2. Local Medication.—Even when antitoxin has been used local medication is still called for. There is very often a multiple infection on which the antitoxin has no direct effect, even granting that it possesses such on the Klebs-Löffler bacillus situated on the surface of the tonsil. Where no local application has been made a secondary growth is sometimes observed, which may be either true diphtheria or something allied to it, just as one species of mould prepares a nidus for another. The number of medicaments vaunted as specifics is enormous. Their success or failure depends to a great extent on the efficiency with which they are applied. To be of use they must reach well behind the tonsil, hence those which can be swallowed are most satisfactory. Strong caustics are long ago out of date. With gargles the infected parts behind the tonsils are not sufficiently reached. Frequent sipping of a diluted antiseptic seems to give the most satisfactory results, but if the deposit persists it is well to vary the application. Inhalations are objectionable on account of the risk of drawing the disease into the larynx.

3. Free Diuresis.—This is mentioned in all works on the subject, but a recent improved pathology has demonstrated the great importance of it. Dr. Murdoch, of Cambridge, New Zealand, considers a case practically out of danger when free diuresis is established, and my own experience confirms this opinion. It is at least admitted that the majority of serious or fatal cases are complicated with nephritis and suppression of urine. The free use of diluents is therefore essential, more especially, if antitoxin has not been used.

4. Antitoxin.—The value of this substance is undoubted, but it should be administered before the third day. If three times the minimum lethal dose of toxin be already elaborated in the body, too much mischief is done for the antitoxin to overtake. Hence the necessity of early treatment. If given at the outset, it is astonishing how quickly the deposit disintegrates and the child convalesces. After considerable experience of its use, I have found the liquid form prepared by the British Institute of Preventive Medicine quicker in its action than the dried form of B. W. & Co., though the latter is exceedingly convenient and quite as effective in the long run. With age both deteriorate and become almost inert. The dried form is sometimes difficult to dissolve, but it injects readily enough in a soft gelatinous condition. The syringe should have a removable cap, so that the piston can be withdrawn for cleansing purposes. A wire kept in the needle is apt to rust and block the canal and should be discarded in favour of a few drops of pure machine oil, which acts admirably for long periods. Antiseptic precautions should, of course, be rigidly adopted. Very few of my cases have shown any joint trouble, or the characteristic rash observed sometimes when antitoxin has been used.

5. General.—If antitoxin has been used late, or not at all, when there is a multiple infection, or when the larynx is involved, much benefit is derived from the bronchitis kettle kept going constantly in the room. This not only favours the loosening of the deposit, but reduces the accompanying inflammation, calms the nervous system, creates a thirst for diluents, and promotes diaphoresis. If mild sulphur fumigations be added, local medication is less called for, and disinfection of the room is secured. Long continued inhalation of Eucalyptus has seemed to me to destroy the appetite, to favour paralysis, and sometimes to cause sudden death.

The diet should be nutritious, even stimulating from the first, given in small quantities at regular intervals. Drinking, *ad libitum*, of skim milk, either alone or diluted with water should be encouraged.

6. Special Cases.—When the larynx is involved, the treatment already indicated is doubly called for. One result of antitoxin in these cases is the rapid disintegration of the deposit and consequent blocking of the tube. Intubation or tracheotomy may then be necessary, but personally I have had little experience of either. Strong stimulant expectorants greatly assist in expelling the obstruction.

Apart from bacteriological examination it is impossible to distinguish laryngeal diphtheria

from simple laryngitis, and we are told to inject antitoxin in all cases. To this I cannot quite agree, for we have just passed through an epidemic of simple laryngitis, requiring little or no treatment whatever, and it would surely have been absurd to have used antitoxin in every case. This is my first experience of a wide-spread epidemic of what our fathers knew as "simple croup," hitherto believing that this disease never occurred in an epidemic form.

A NOTE ON THE BACTERIOLOGY OF EMPYEMA.

BY H. M. EVANS, M.B., B.S., ADELAIDE.

A H., *æt.* 8 years, was admitted to the Adelaide Children's Hospital on the evening of October 26th, 1898, under Dr. Lendon's care.

Shortly after admission, the skin, having been well scrubbed with 1-1,000 perchloride of mercury, a sterilized hypodermic syringe was taken and a little pus drawn off, and at once transferred to a sterilized tube for bacteriological examination.

A cultivation was made the same evening on gelose.

Next day the cultivation, in addition to the filmy diplococcic growth, showed also some white glistening colonies, which, on examination, proved to be a *staphylococcus albus*.

I was surprised to find staphylococci for two reasons:

- (1) I thought the precautions against contamination were efficient.
- (2) The child had had pneumonia, and in the pus of empyemata following pneumonia we have invariably found the diplococcus pneumoniae only, and obtained pure cultures of it from the pus.

On October 27th the child was operated on. A sterilized flask was at hand. After making the skin incision the wound was thoroughly washed out with 1-1,000 perchloride solution. The pleural cavity then opened, and after the pus had been escaping freely for a few seconds some was collected, and cultivations from this pus gave pure cultures of the *diplococcus pneumoniae*.

My impression is that the first pus was contaminated from the skin by the staphylococcus epidermidis.

In support of this I may briefly refer to another case.

Some blood was sent to us for examination from a man who had had an irregular, but high, temperature for some weeks. In this case a boiled hypodermic syringe and needle were

used to withdraw the blood, the skin having been previously scrubbed with 1-1,000 perchloride solution. A cultivation from this blood yielded a pure culture of staphylococcus albus. Feeling that this was probably due to contamination from the skin, an incision was made over a vein in the forearm, the wound cleansed with 1-1,000 perchloride, and some blood withdrawn from the vein with the same aseptic precautions. Cultivations from this blood were made in broth and on gelose and blood serum; but there was no growth in any case.

From these remarks it can be easily seen how an avoidable error may vitiate statistics, and how bacteria in and on the skin contaminate fluids withdrawn from the body for bacteriological purposes.

WHY COUNTRY HOSPITALS ARE A FAILURE IN FRANCE.

BY EDWARD CONNER.

THE cause of this defect is not so much to be attributed to the prejudice entertained by French country people against hospitals as to State interference *versus* private initiation. The rural classes in France are strongly opposed to such institutions being founded in their villages; they maintain that hospitals were intended for large towns, and not for villages, where mutual help among neighbours in cases of sickness goes a long way towards replacing hospitals. In towns, the population has a tendency to be selfish; hence why, in France at least, hospitals answer several purposes. In many cases, they do duty as asylums for indigents. The same facilities that exist in villages for caring the sick are wanting in towns. *Amour propre*, or self-respect, is so predominant among the rurals that they prefer to die at home rather than cross the threshold of any hospital. But hospitals are not the less a necessity when surgical aid and complicated treatment are demanded. The Paris municipality have discovered that they committed a great mistake by allowing some of the city hospitals to be converted into part refuges for the poor; many of the patients turned out to be but first-class impostors. When winter approached they feigned illness, the better to secure admittance. In order to punish such wilful idleness, a famous French doctor had the ingenious idea to treat all those whose affections he appropriately called "*pigris aigue*," or acute laziness, by a low diet and blisters. The result was indeed magical, for a cure ensued generally within forty-eight hours,

when the "patients" were discharged. Hospitals are peculiarly a necessity for sick servants, such as ostlers, coachmen, etc., whose masters are unable to care them during illness whilst having to engage the services of additional hands.

The majority of French country hospitals are defective in point of management; they lack fixed rules; hence, suffer in appreciation by the general public. During the fifteenth century, rural hospitals were very common in France. They had, however, to suffer like similar establishments during the Hundred Years' War, revolutions, civil and religious rebellions, etc., all of which brought ruin to several by depriving them of certain rights and bequests on which they depended for support. The number of rural hospitals is to-day very inadequate; too often the sick residing in remote country places have to be conveyed to large towns before being treated. This is precisely the centre of the defect of the system, and where municipal complications are greatest. A hospital in France, properly speaking, is only intended to receive the sick of its own *commune*, or immediate locality; outsiders are sometimes admitted, but solely on the condition that the authorities of his native *commune* will later defray all expenses incurred on his behalf, generally estimated at 1fr. 50c. per day, or 1s. 3d. This sum, though modest, is seldom refunded; the hospital managing committee maintain such payment should by right be reimbursed. As the *Conseil Général* of the Département is inclined to meet half the incurred outlay, hospitals are compelled to remain out of pocket for the other moiety. The law, too, is so unjustly framed, that a *commune* cannot be forced to pay any sum disbursed, unless first sanctioned by the municipal council. Now, to convoke the latter body with the view to deliberate upon admission claims, it is essential that the applicant shall show proofs that he was injured whilst at work, or that the called-in doctor had himself ordered the transport of the patient to an hospital; if otherwise, no demands will be entertained. To make matters worse, they are the parents or neighbours, as a rule, who bring patients to hospitals; the mayor sometimes may effect an admission, but even his official standing is powerless to secure payment from the municipal council.

What happens then? It is left to the hospital managers to exercise their own discretion whether they will admit or refuse a patient. Out of pity, sometimes, an invalid is "smuggled" in through the ignorance of employees. Once

inside the building, the sufferer will of course be treated free of all charges on his native *commune*. He can be refused admittance if the directors wish to act strictly by the rules; in such a case the friends of the patient have no other choice left but to try another hospital, where humanity will be more characteristic. This transporting of sufferers, too, often causes immediate death from exposure and exhaustion. It is not uncommon for country people, who are aware of this treatment, to have recourse to other means—equally as cruel—in order to secure admission into hospitals for their invalids. They convey sufferers in the middle of the night to the very door of the hospital, and there abandon them to their fate; if the porter chances to open the door, and is inclined to exercise mercy, the individual will be taken in. This artful plan often succeeds, because all hospitals are compelled by law to take in patients found suffering within the precincts of their district. Sufficient time, however, is allowed to elapse between the moment the sufferer is taken inside to his being comfortably installed in a ward, for either his becoming worse, or for death to ensue. It would be erroneous to conclude that this stern refusal on the part of an hospital to admit the sick from adjoining *communes* is due, very frequently, to the want of accommodation. Though this may be so in some cases, the officials ought to display much more kind-heartedness than they usually do, not the less. Public opinion, in presence of this confusion, has every reason to call for redress. By way of remedy, it suggests that city hospitals be compelled to receive country patients so long as accommodation is possible. Many urban institutions would be very glad to comply with such a request; but cannot do so from want of funds. They further assert that wealthy *communes* should be forced to contribute according to their means, to support all institutions willing to accept patients irrespective of their non-residential standing.

There exists another serious cause for dissatisfaction, namely, that French hospitals are not assessed alike. For instance, whilst the number of spare bed in the département of the Hérault is 5.5 per 100,000 inhabitants, it is but 5.5 in the Creuse for the same number of persons. This disparity of margin should not be allowed; if hospitals are expected to do their duty—to relieve the sick, whenever they be sick. In presence of this want of aid—equilibrium—it is imperative to advocate a remedy. The State ought to supply that, as a matter of course, according to French

ideas. Impossible, for the State has its hands too full already, and cannot grant more money than it actually does. The *communes* are equally limited to apply a practical remedy; very few of them in any case would be able to face the necessary expenditure. Besides, hardly one *commune* in a thousand out of the 36,000 *communes* in France, would be found willing to accept the desired outlay. They are already burdened with heavy taxes, notably for the new schemes of education. Hence, why *communes* refuse to incur further liabilities, they have as much as they possibly can do now to make both ends meet. Another solution is advocated, namely, the union or consolidation of several *communes*. That arrangement, though opposed during a number of years, has become law since 1884. It is not so easy to get a scheme of that nature to work at once. To achieve such an end it would be necessary to compel *communes* to embark in an expenditure which they consider perfectly useless; the more so, as they have till now managed very well without such a combination. Public opinion does not believe in any case that this concentration plan will ever receive support.

The true solution of the embarrassing situation is to have recourse to private initiation; the more so, as that idea formerly succeeded in France, suits public feeling, and meets with warm support in many foreign countries. Were it once again tried, it has all the chances to solve an intricate and financially delicate problem. In point of cost it would represent only a nominal addition to the tax-payers' burden; it would not entail an increase of officials—that scourge for all French establishments. Unfortunately, State interference, as usual, bars the way, exercises a veto upon private individuals from bringing about their desired ambition. Were the generous souls allowed to build hospitals and have them administered by persons whom they pleased to nominate, country hospitals would at last be a success. This state of things did not always exist. At one time, any person in France could have had an hospital built and governed by whomsoever he chose; but *nous avons change tout cela*. The French Government of to-day refuses citizens the liberty enjoyed by all Britishers and Americans. It exacts that bequests must be willed direct to the State, to the department or county, or to the *commune* wherein the donor resides. The locality can only accept the bequest on the express condition that its administration shall be controlled by the State on general lines for the

interest of all. This may well explain why the wealthy French aristocracy no longer found or endow benevolent institutions.

Were the State to cease interfering with private initiation, country hospitals and similar institutions would spring up with wonderful rapidity. It is not absolutely necessary to build a mansion-hospital, merely a country house with a garden. Donations of linen, articles of furniture, money gifts, all these distributed little and often would soon bring about a radical amelioration. The very thought that the State intends appropriating such charitable legacies suffices to create hesitation.

The prototype hospitals of Taxier-Gallas, situated in the department of the Eure-et-Loire, might well be selected as models for future constructions. They each comprise four separate beds, a large hall where consultations take place, and that could in case of emergency be converted into a ward; a bathroom, a surgery, or a special room for supplies for the sick. Again, baths, and various other apparatuses are lent out on hire at a nominal fee. These hospitals have been built with special care; that of Auneau cost 67,000 francs. Costly though it may be, it nevertheless represents solely the proceeds of charitable donations. Less expensive mansions would equally answer the same ends, and would have the advantage of not requiring the assent of the law, nor would special decrees be required to be drawn up before working such houses for the sick. Leave private charity free, no State intervention whatever. That is the true practical remedy to supply France with rural hospitals.

MONOCULAR EXOPHTHALMOS R.—A CASE FOR DIAGNOSIS.

By A. L. KENNY, M.B., CH.B., HON. SURGEON,
DISEASES EYE, EAR, NOSE AND THROAT,
ST. VINCENT'S HOSPITAL, MELBOURNE.

A. O'L., domestic, single, *æt.* 21. First seen St. Vincent's Hospital, 8th Nov., 1898, complaining of protrusion of right eye with aching pain at the back of it.

There is a history of "severe rheumatic fever and debility" when aged 14, for which she was treated as an in-patient at the Melbourne Hospital, and a repetition of the same in Nov., 1897, during which illness her medical attendant noticed the proptosis, and at which time patient first became aware of it and of an aching pain at the back of the eye—there has since been a period of six months without this pain until lately. The catamenia are painful, and until

this month the prominence of the eye was more marked at these periods. Since the November illness there have been financial and other home troubles which have further interfered with patient's health.

The right eye-ball is protruded forward, and to a lower level than normal. No thrill or pulsation is perceptible. The globe fills the opening of the orbit too closely to enable any information to be obtained by palpation—there is no deformity in the vicinity of the orbit. The nasal and nasopharyngeal cavities are normal. The eye "waters" a good deal. The lids cover the eye well—there is no Von Graefe, Dalrymple, or Stellwag sign—movements are unimpaired. The right lobe of the thyroid gland and the isthmus are very slightly enlarged.

The family history shows an absence of insanity. The only form of nerve disorder is that shown in a sister *æt.* 16, who has been subject to "fits" since a severe fright. One sister died from pulmonary phthisis, and one brother suffers so now—both older than patient. No history of cancer or tumour formations.

Dr. Molloy, Melbourne Hospital Superintendent, has very kindly referred to the case book for Ward 11 of the Melbourne Hospital, where patient was under the care of Dr. Moloney in 1891—the notes are that she complained of pains in the large joints, with weakness. Had had diphtheria not long previously. There was no swelling of the joints, no rheumatic fever; the cardiac weakness was attributed to the diphtheria, and patient was kept in the wards only three or four days.

RV = $\frac{5}{8}$ 41 : J 1 at 19 cm. : pp. 15 cm. : No Astig. Hm. 0.25 D = $\frac{5}{8}$.

LV = $\frac{5}{8}$: J 1 at 19.5 cm. : pp. 14 cm. : Hm. 1 D = $\frac{5}{8}$. Vertical lines best seen, but cannot correct subjectively.

Right Eye.—Retinal veins enlarged. Some alteration in the choroidal pigment in a triangular line with its apex at the disc, border running inwards and slightly downwards. Cloudy white nerve fibre spreading slightly in same direction.

Left Eye.—Pigmented edged external ring—spot of pigment lower border of optic disc.

Visual fields and colour sense normal.

Dr. J. H. McGEE reports as follows :—

Rachitic chest with depressed and fenestrated sternum.

An exceedingly irregularly acting heart without any sign of valvular disease. Probable that she had pericarditis with her rheumatic fever.

Pain under left breast for years—worse for last month—stabbing when breath is drawn; palpitation; anorexia; sleeps badly; faints sometimes.

COMBINATION OF SYPHILIS AND EPITHELIOMA OF THE TONGUE—MICROSCOPIC SPECIMENS.

By A. L. KENNY, M.B., Ch.B., Hon. Surgeon
DISEASES OF EYE, EAR, NOSE, AND THROAT,
ST. VINCENT'S HOSPITAL, MELBOURNE.

M. C., married, *æt.* 49. First seen as an out-patient at St. Vincent's Hospital, Melbourne, on 20th May, 1898, complaining of sore throat of three months duration, for which he had been treated by two medical men without much relief. There was a deep ulcer on the anterior surface of the right tonsil and right anterior pillar of the fauces surrounded by intense lividity. Syphilis was suspected, but the history could not be obtained until 24th June, 1898, owing to the patient's wife being present at each consultation. A mixture of quin. sulph., mag. sulph., with acid sulph. dil. was prescribed, with an antiseptic gargle, and the external application of hydrarg. oleat 10 per cent. Under this treatment he commenced to improve immediately. A history was obtained of gonorrhœa at the age of twenty-one years, commencing two or three days after exposure to infection, followed in four days by a single hard sore at the tip of the glans penis—this sore was "burnt off" by some ointment supplied by a chemist—the discharge persisted two months. Patient has never had a skin eruption, sore throat, or other evidence of syphilis until present throat trouble. Married twenty-four years—six children, all healthy—one, a boy, aged 14, was seen by reporter at St. Vincent's Hospital on 17th August, 1894, for ulcers and corneal opacities in both eyes, not suggesting syphilis. The wife has never miscarried.

In June M. C. was put on potass. iodid., beginning with gr. v., and gradually increasing. The ulcer healed perfectly.

About two months ago soreness of the left side of the tongue near the left anterior pillar was complained of—nothing abnormal could be seen, and there was no source of irritation, *e.g.*, sharp tooth edge, etc. Potass. iodid. was resumed without relief. Soon a slight depression with irregular base was noticed, but no ulceration or discharge.

Mr. G. A. Syme saw the case in consultation, and diagnosed it as syphilitic, advising hydrarg. during the day with potass. iodid. gr. xx. at night. This was gradually increased until the gums became sore, and was continued at a dosage sufficient to keep up that effect, but without any relief to the severity of the pain

(worse at night) or to the difficulty in swallowing, owing to the tenderness of the tongue. On further consultation Mr. Syme advised excision of the offending portion, which now gave the sensation of a hard swelling the size of a split pea just beneath the surface of the tongue. After application of cocain this was excised with scissors on 12th November, 1898, and given to Dr. Officer for examination. He will report his opinion to you now.

The previous treatment has been continued, and the patient has slightly less pain and swallows more readily. He is now in St. Vincent's Hospital under Mr. G. A. Syme, awaiting operation.

DIFFICULTIES IN MICRO-DIAGNOSIS OF MALIGNANCY, WITH AN ILLUSTRATIVE CASE. (TUMOUR OF TONGUE.)

BY DAVID McM. OFFICER, M.B., HON. MEDICAL OFFICER CHILDREN'S HOSPITAL, HON. PATHOLOGIST ST. VINCENT'S HOSPITAL, MELBOURNE.

THIS case, exhibited under the microscope, is of especial interest to both surgeons and to microscopists as a good exemplification of the difficulties which may be encountered in arriving at an accurate diagnosis in certain tumours, even with the elaborate means which the science of optics and the ingenuity of manufacturers have favoured those who engage in micro-diagnostic pursuits.

This tumour, of which Dr. A. L. Kenny has given elsewhere a most thorough clinical account, presents on section the following features observed with the low power:—

1. Masses of epithelium dipping down continuously from the epithelium on the dorsum of the tongue into a mass of connective tissue material in a more or less irregular manner.
2. Masses of epithelium from the opposite side, apparently much broader in outline than those of No. 1, but not invading the connective tissue so deeply or so irregularly.
3. At various parts, chiefly on the surface or just below the surface of the epithelium mentioned under (1), a number of concentric horny masses, not unlike cell-nests, on superficial examination.
4. Scattered through the connective tissue are a large number of small round cells, with one and occasionally more than one nucleus, and in parts can also be seen a number of islets of epithelium, quite separated from the prolongations of the epithelium mentioned in No. 1. Also in parts the coats of the small vessels seem thickened, especially the intima.

So much for a general survey of the section. Turning now to a closer examination of these leading features, and beginning with the first, it is found that the processes can all of them be traced fairly easily down to their termination. From the sides of these processes points jut out here and there, and occasionally in the centres of these processes there is a fairly well-marked, rounded, or in some cases a slit-like hiatus is visible where connective tissue takes the place of epithelial cells, the circlet of epithelium surrounding the connective tissue being the same as that bounding the processes and forming their outlines.

This limiting line of epithelium is everywhere fairly sharply marked off, and, in a few places only, especially where the process is not very long, is it at all hazy, and shades gradually off, and the boundary in these places is not definite, and easily traced. To these parts in particular I shall have to refer later on. The epithelium composing the bodies of the processes is of the ordinary squamous type, and in many places well-marked prickly cells can be made out by careful focussing.

The elements mentioned under heading 2 are apparently the downgrowths of epithelium from the under surface of the organ, and appear normal in almost every way, except that in parts the deep layers are seen to be several cells in thickness, the margin showing a tendency to shade off in places, whilst at other parts the margin is clearly defined and abrupt, as it normally should be, and no irregular processes can be seen passing deeply into the connective tissue, nor any processes jutting out from the sides of the parent processes.

The nests which are seen by the low power when more highly magnified are seen to be more regular than the nests seen in carcinomata of a fully developed kind, and in very few places is there any multinucleation of the cells. Furthermore, what is very important from a diagnostic point of view, there is advanced horny change in some of them.

The connective tissue is in a state of irritation, as can be seen by the large number of leucocytes which appear as clouds scattered through the connective tissue.

Having thus detailed at some length the microscopic appearances, I will now attempt to point out how some of these appearances may be the result of artificial, or should I say accidental, production in a tissue which may be benign, and I will terminate by pointing out the conclusions which can with a considerable show of reason be drawn from the examination of the present specimen.

False Appearances Accidentally Produced.—

Take a benign tumour of the tongue, or even a normal tongue, and cut the section in a slanting direction, and the appearance of a long prolongation of the normal papilla will be contributed to not only by its own length, but also by its breadth, and in this way, especially with papillæ of some breadth, an appearance of deep prolongation into the connective tissue will be falsely produced.

Furthermore, islets of epithelium will be cut off and appear separated from the prolongation, and the hiatus or slit-like holes will appear if the depression between two papillæ be cut through. Should the very floor of the depression be divided, a round layer of horny epithelium will appear, and a false impression of a cell-nest produced.

If the deep layer of cells be cut in a very slanting or almost horizontal direction, the deeper layer of cells will appear to be actually several layers thick, and a false impression of actual active proliferation be produced.

The Guides to Correct Diagnosis.—The chief points from which to seek help in coming to a proper diagnosis are the following:—

1. A study of the processes of epithelium. If there are many secondary processes found jutting out in irregular directions, it should arouse some degree of suspicion, and especially if these processes are exciting any irritation of the connective tissue. Normally the connective tissue grows in a normal manner if left to itself, but immediately any growth of epithelium takes place into it, it seems to act on it in much the same way as other aseptic foreign substances, and produces some vascular re-action.

2. A study of the cell-nests and deep layers of cells of the processes.

The cell-nests should be searched for any signs of multiplicity of nuclei, secondary fatty degeneration, &c., in any of the cells composing the nests, and the Malpighian layer, when actively dividing, are often seen with evidences of division of the nuclei, whereas normal cells cut in a partly horizontal way are mono-nucleated.

3. Close observation of the connective tissue for evidences of irritation, especially in the region where the processes seem to be abnormally long, or the Malpighian deep cells seem to be actively proliferating.

The present case has been diagnosed as suggestive of malignancy from the fact that there is some irregularity in the shape of the processes, secondary points of epithelium being rather common, the presence of some actual proliferation of the deep Malpighian cells, and the irritative condition of the connective tissue.

It must often happen that a grave difficulty in micro-diagnosis presents itself, and the importance of due consideration being given to any evidence which appears at all on the border line between malignancy and non-malignancy, cannot well be over-stated. It is a serious matter for patient and surgeon alike if an operation is done where none is necessary, and a much more serious one if surgical procedure is not adopted if it be really necessary, and I have on several occasions noticed and duly appreciated the difficulty, notably in a case sent to me by Mr. Stirling, where the appearances were suggestive, but not markedly so. However, the patient decided, and Mr. Stirling, on the clinical evidence, concurred, and an operation was performed. The tumour was undoubtedly commencing to be malignant, and an enlarged gland shared in the process.

I know also of another case in which a diagnosis of malignancy was given by one observer and non-malignancy by another. But this was a growth of the foot, and was of the nature of a sarcoma, and therefore does not bear so much on the present cases; but papillomata have been known to imitate closely the epitheliomata in some respects, and have before now led to confusion.

It is to point out some of these difficulties which microscopists meet with that I have committed these fragmentary notes to paper, and I trust that they may be of some small use.

A FEW NOTES ON A CASE OF ANTHRAX.

BY ARCHIBALD F. HEPWORTH, L.R.C.P.
AND S. ED., YARRAWONGA, VICTORIA.

As anthrax in man is fortunately rare, and patients often present themselves for treatment when the disease has progressed too far, the present case, which was successfully treated by free excision, may be of interest.

Mr. J. T., of Mulwala station, New South Wales, who had been engaged there in filling the syringes for inoculating the sheep against anthrax, was sent to me by Mr. W. J. Marshall, chemist, of Yarrawonga, on Sept. 6th, 1898.

Patient complained of having felt ill for a couple of days, pains all over his body, severe frontal headache, loss of appetite and general malaise, and of great swelling and pain in the right side of neck and glandular enlargement.

He also suffered from a feeling of suffocation in the throat due to the swelling, and a nasty troublesome laryngeal cough.

On examination the temperature was 104° F., the skin dry and hot, the pulse much accelerated, and a well-defined malignant pustule situated on the right side of neck, posterior to the sterno-mastoid. All the neighbouring glands were much inflamed, and the tissue surrounding the pustule was swollen, red, and indurated. Microscopic examination of the serum drawn from the vesicles at once demonstrated the anthrax bacillus in large numbers.

As free and immediate excision was the only course to pursue, I gained the patient's consent to this procedure.

Assisted by Mr. Warren Parsons, M.B., the whole of the indurated tissue around and containing the pustule was excised under chloroform, measuring 2 in. x 1½ in. x ½ in., and laying bare the deep cervical fascia. All bleeding vessels being secured, the wound was well swabbed with an 8 per cent. solution of chloride of zinc, and the upper and lower angles of the wound were drawn slightly together with carbolised silk worm gut. The surface was then dusted with iodoform, and dressed in the usual way.

The following day, Sept. 7th, the patient was feeling much better in every way. Temperature 101° F., swelling considerably less and much softer to the touch. The wound looked exceedingly healthy.

On Sept. 8th the patient felt quite himself again; temperature normal, good appetite, had slept well and was able to return to usual diet and get up.

The recovery from this onwards was uneventful.

GOUT AND ITS REMEDIAL AGENTS.—We have received from Messrs. A. Bishop and Sons, of Spelman-street, London, and 18 O'Connell-street, Sydney, a small pamphlet bearing the above heading, which they will forward to any practitioner desiring it, who will communicate with their Sydney office. The little brochure contains in a very concise form valuable information as to "uric acid solvents," culled from such authorities as Garrod, Duckworth, Gordon, Finzelberg, and others. Messrs. Bishop prepare in "granular effervescent" form, as well as in "varalettes," most of the said solvents, both singly and in combination. Their Sydney office has just received a supply of the following "varalettes":—Antipyrin, antipyrin + caffeine, bismuth ammonio-citrate, lime glycerophosphate, lithia bitartrate, lithia citrate, lithio-piperazine citrate, lithia and potash citrate, piperazine citrate, potash bicarbonate, sodium bromide, urotropin. Also the following "mineral water" varalettes: Carlsbad, Friedrichshall, Seltzer, Kissingen, and Vichy.

PROCEEDINGS OF BRANCHES.

VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE ordinary monthly meeting of the Branch was held in the rooms, Austral Buildings, Collins-street, on Wednesday, November 30th, at 8 p.m. Present: The President (Dr. McAdam) in the chair. Drs. Kent Hughes, Springthorpe, Nihill, O'Hara, Gertrude Halley, J. L. Greig, Henry, Officer, Lawrence, Gault, Buchanan, Strong, Loughnan, Harricks, Black, Nall, Owen, A. V. Anderson, Hamilton. Dr. Webster was present as a visitor.

The minutes of the last meeting, as printed in the *Australasian Medical Gazette*, were confirmed.

The PRESIDENT reported *re* the deputation to the Chief Secretary on the milk question.

The SECRETARY reported *re* the conference as to the relation of the profession to the friendly societies.

Dr. HENRY regretted that the matter had been given so much publicity in the public Press.

Dr. A. L. KENNY showed a case of "monocular exophthalmos," and read notes. (See page 530).

Mr. W. KENT HUGHES considered the case to be one of early exophthalmic goitre, noting the early exophthalmos and the enlarged right thyroid gland.

Mr. H. M. O'HARA would agree with Mr. Kent Hughes if there had not been the history of heart trouble at the age of 14½ years. He could not feel any enlargement of the thoroid gland. He thought the right eye showed slight external strabismus with protrusion downwards and outwards—this was against a diagnosis of Graves' disease. It seemed to him to be like a slow-growing sarcoma or enchondroma. He would not connect the exophthalmos, in any way, with the heart. He had recently seen a case with Drs. Gault and Nihill, in which one eye had been displaced directly forwards—on exploring the orbit with a needle Dr. Gault found pus, which was traced to the frontal sinus—the sinus was operated upon by Dr. Gault, and the patient got well. He suggested exploration with a hypodermic needle.

Dr. P. WEBSTER thought the pulse lacked the frequency of Graves' disease. He was aware of a case in which the usual eye symptoms with exophthalmos came on for the first time some months after the patient had recovered from the other symptoms of Graves' disease. He favoured diagnosis of growth in the orbit in this case to-night—with the displacement forward and no lateral deviation, he inclined to the opinion of a growth in the sheath of the optic nerve. He had seen such tumour in one case after operation, with protrusion straight forward only.

Dr. NIHILL did not think the general condition of this eye suggested exophthalmic goitre. He suggested administration of potass. iodid.

Dr. LOUIS HENRY inquired as to the presence of aneurism or other vascular change.

Dr. GAULT considered that an orbital tumour would cause some lateral displacement of the globe unless it were situated in the optic nerve. In this case there was no lateral deviation, and there was no diplopia. If further tests failed to show diplopia he would exclude all orbital tumours except those of the optic nerve. The length of time during which proptosis had existed without failure of vision was against tumour of the optic nerve. He would not advocate active exploration. The case should be watched.

Dr. J. THORPE had seen a case of exophthalmos, lateral deviation, hemianopsia, and vomiting relieved by potass. iodid. for a time. *Post mortem* examination disclosed aneurism.

Mr. A. L. KENNY replied that he did not think the case was one of exophthalmic goitre—his first suspicion was of a vascular lesion, and then of hydatid. He thought the acuity of vision for form and colour, and the normal field argued against tumour of the optic nerve with a twelve month's history. He was not inclined to explore just yet. Frontal sinus trouble was negatived by the condition of the nose, the absence of tenderness, etc., over the anterior and orbital walls of the sinus, absence of high temperature, duration of proptosis without symptoms referable to the sinus. The displacement was forwards and slightly downwards, and was not at all lateral—seeming to exclude most orbital tumours. He was grateful for the interest taken by members, and for the various suggestions made. He intended to watch the case.

Dr. KENNY showed a case of "ulcer of the tongue," and read notes. (See page 531).

DISCUSSION.

Mr. H. M. O'HARA recalled the case of a tobacconist, *æt.* 40, seen with Dr. Maudsley. Patient was unconscious, with cerebral pressure symptoms, vomiting, etc. He was given inunction of 10 per cent. oleate of mercury, with iodide of potash by the rectum. He got well. Six months afterwards he came back with an ulcer on the middle third of the right edge of the tongue. This did not yield to anti-syphilitic treatment, and one-third of the tongue was removed one month ago. Patient did well. He advised removal of portion, not the whole, of the tongue in the case shown.

Dr. H. LAWRENCE asked if there were leukoplakial patches on the tongue, or if patient were a heavy smoker. (Mr. Kenny replied that the patient had smoked heavily up to the end of 1897.) Since then he has not smoked.

Dr. WEBSTER asked what dose of iodide of potash had been given. (Mr. Kenny stated up to 25 grains three times daily.) He found that up to *gr.* ter. die. was often beneficial and necessary. He suggested that one tooth in this case was possibly keeping up the irritation. He gathered that Dr. Officer was not certain of the malignancy of the specimens.

Dr. HENRY pointed out that an increase of bodily weight under antisyphilitic treatment in doubtful cases was useful as a diagnostic aid. He mentioned a case under his care in the hospital at the Immigrants' Home with symptoms of brain pressure, but no glandular involvement, to whom he had given 120 grains of iodide of potash two or three times a day. There was something on the tongue which cleared up.

Mr. W. KENT HUGHES commented upon the early appearance of the venereal sore in this case. Might there not have been another source of infection?

Mr. A. L. KENNY, in reply, thanked the members for the discussion. It was known that cases of undoubted syphilis might miss their secondary stage altogether. Body weight would have been a fallacious guide in this case, as the pain in the tongue prevented the patient taking food well. That the antisyphilitic treatment had been well pushed in this case was evident from the factor of the breath and mouth secretions. He was aware of the value of heroic doses of iodide of potash. The patient was a temperate man.

Dr. O'HARA read for Dr. Hepworth, "Notes on a Case of Anthrax." (See page 533).

Dr. HARRICKS was much indebted to Dr. Hepworth for his interesting case. He had seen cases of wool-sorters' disease in Yorkshire. Early and free operation was called for.

Dr. SPRINGTHORPE referred members to the only other authentic case in Australia, which he had reported some four years ago in the *Gazette*. No doubt many cases of "blood poisoning" were really cases of anthrax. The possibility of cedema instead of pustule should be always remembered. Diagnosis was quickly possible not only by the discovery of the easily recognised bacillus, but by the inoculation of rabbits, etc.—which died in 24 hours. Almost all cases of external anthrax could be saved if taken in time, though internal forms were invariably fatal. In his case free incision had been followed by injections of pure carbolic, which was then the best known treatment, but, evidently, free excision, where possible, was preferable, as local treating was then apparently much more rapid.

Mr. O'HARA had never seen a case, but agreed that the present case showed the advantage of excision. He congratulated Dr. Hepworth upon his rapid and careful diagnosis, and upon his skill in carrying out the best treatment.

Dr. KENNY read a paper on "A Case of Empyema of Frontal Sinus Treated by the New Russian Operation" (which will appear in a future issue.)

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE regular monthly meeting of the Branch was held at the Royal Society's room on Friday, 25th November, 1898, at 8.15 o'clock, Dr. Wm. Chisholm (president) in the chair. There were also present: Drs. Knaggs, Traill, West, Clark, Goode, Angel Money, O'Reilly, Blaxland, Lloyd, Gledden, W. H. O'Neill, Fawkins, Warren, E. F. Ross, Kendall, Fiaschi, Clubbe, Scot-Skirving, Worrall, Sinclair, Crago, G. O'Neill, Spencer, Littlejohn, G. Armstrong, Thomas, Sinclair Gillies, Magnus, Hankins, G. A. Marshall, Marano, Arthur, Brady, S. H. Hughes, Doak, Kyngdon, Mullins, G. R. P. Hall, Robertson, Binney, Pockley, Litchfield, Schrader, Abbott, Walker-Smith, Macdonald Gill, F. W. Hall, Barrington, Maitland, Chenhall, J. A. Dick, A'Beckett McCarthy, O'Hara, Thring, H. H. Marshall, Coutie, and others.

The minutes of the previous meeting were read and confirmed.

Dr. WM. CHISHOLM (the president) announced that the gentlemen who had their names on the business-paper had agreed to defer reading their papers in order that Dr. Clarence Read might bring forward his motion that evening, as it dealt with a matter of great interest to the profession. He mentioned that at a meeting of the Council of the New South Wales Branch, held recently, the opinion expressed was that those members of their profession who held lodges, or acted as medical officers to societies whose scale of fees was at a lower rate of payment than the several medical associations approved of, and continued to hold such appointments in spite of repeated remonstrance, were deserving of the severest censure for their conduct, and also merited punishment. But as to the wisdom or advisability of inflicting any penalty, the Council was not unanimous. The Council felt that this was a matter which should be decided by the whole Branch, and a majority had agreed to accept an amendment to Dr. Read's motion, to be moved by Mr. Hankins, which provided that the punishment to be dealt out should not be retrospective. He suggested that as there were, he believed, several amendments to be introduced for discussion that night, that it would greatly expedite the business of the evening to have all these amendments before the meeting before the

discussion on them took place. He therefore called upon Dr. Clarence Read to move the resolution standing in his name on the business-paper.

Dr. CLARENCE READ proposed the following resolution,—“That any medical man who has held the position of medical officer to any society which has been declared by the Council of this Association to be inimical to the interests of the medical profession, or who shall have held any lodge at annual fees per member below those approved of by the local medical association of his district, shall be ineligible for membership of this Association for the period of at least five years from the date of his ceasing to hold such appointment, except under exceptional circumstances, and shall not be met in consultation by members of this Association during the period of disqualification for its membership.” In moving the resolution, he said his motion was similar to one adopted by the North Sydney Medical Association a few months ago, and that modifications of it had since been passed by the Eastern and Western Suburbs Medical Associations. At a conference of three associations held on 16th November, a fresh resolution had been drafted from the preceding one with the intention of bringing it before the meeting that night, but it had since then been learnt that sufficient notice of the intention had not been given, so he had to propose the original resolution. He considered the matter one of the utmost importance to the profession, and the subject would be of still greater significance to them in the immediate future unless the question was dealt with at once, and that in a satisfactory manner. A number of medical men had been in the habit of commencing practice both in the city and suburbs by means of medical benefit societies, attending members at rates below what was considered legitimate and fair. And in spite of remonstrance these practitioners persisted in such conduct, to the general disadvantage of their more conscientious *confères*. And on having by such means established themselves to some extent, at the expense of more honourable men, they strove to kick away the ladder by which they had risen, when it suited their purpose, with the idea of being received into the ranks of honourable men. If men of such principles were to be received and treated as equals it would mean whitewashing them, and so be a direct inducement for young men commencing practice to follow a similar course, to the detriment of the whole profession. If, as he advocated, practitioners of this description were treated as their behaviour warranted, and were not met in consultation by conscientious medical men who scorned to resort to like methods of self advertisement, the result would be that the public would get to hear of such being the case, and as a natural consequence would decline to employ doctors who could not call in valuable assistance in urgent cases. There would always be a certain number of weak-kneed members in a large body such as their Association, and it would be wise to take measures to protect such from themselves rather than to hold out inducements for them to take to evil courses.

Dr. GREGORY O'NEILL, in seconding Dr. Read's resolution, considered that action of the sort was urgently called for. There were men who had in ignorance accepted such appointments, men who had, on the advice of the New South Wales Branch, promptly resigned such appointments, thereby placing themselves at a distinct disadvantage with their less scrupulous *confères*. If the Branch were to go back upon the steps it had already taken in the matter, it would be stultifying itself, and cause an injustice to the bulk of the profession. They were urged in some quarters to deal

leniently with these offending members. Clemency was advocated, but it must not be forgotten that these practitioners had been warned over and over again, and he agreed that such should be treated as their conduct deserved. Honourable medical men should hold aloof from them. He had spoken on the question with many of his professional brethren, with those living in the city and those in the suburbs, and, as far as he had been able to gather, the consensus of opinion was that the New South Wales Branch should protect them from these men, whose one object was unlimited self advertising, and if the Branch proved unequal to such action then the sooner members withdrew from it the better.

Mr. HANKINS said it was very unfortunate that so much time had lately been taken up with political and legislative questions, but as there were no Acts of Parliament or General Medical Council in this colony for the protection of the profession, this Association must accept the responsibility. With reference to the business now before the meeting, as the matter stands the medical officers of certain societies cannot be met in consultation by the members of the Branch. Now that some of these gentlemen have resigned their positions in these societies and desire to be rehabilitated, the question arises as to the proper way of dealing with them. There are always difficulties about retrospective legislation, for as we do not know all the circumstances of each individual case, we cannot exclude the possibility of injustice. One of our objects should be to break up these societies by inducing their medical officers to leave them forthwith. If we punish those who are willing to retire we fail in this object. The resolution of Dr. Clarence Read was too drastic, and he would move as an amendment the addition of the following words: “This resolution not to come into force until January, 1899, and not to be retrospective.”

Dr. FIASCHI seconded Mr. Hankins' amendment, and in doing so said he did not think this question should be approached in temper. Justice should be meted out to all alike. These men had already been punished. They had been practically cut off from all the privileges which their years of study entitled them to. The question then was, was it good policy to continue this punishment? He (Dr. Fiaschi) did not think so. He thought it would be altogether bad policy. It would be better to bring these men back into the ranks of honourable practice. If after the 1st January next men continue in their evil courses, they will know what to expect, and will do it at their own risk.

Dr. ABBOTT agreed in the main with Dr. Read's resolution, but feared that there would be considerable opposition to it, and he held that such a proposition to be effective should be passed by a large majority of the Branch. He also considered that Mr. Hankins' amendment, if carried, would cause a strong feeling of dissatisfaction among many members who thought that certain medical men should not escape without a penalty of some sort. He therefore proposed an amendment which he trusted would meet the views of most of those present: “That any medical man who has held the position of medical officer to any society which has been declared by the Council of this Association to be inimical to the interests of the medical profession, or who shall have held any lodge at annual fees per member below those approved of by the local medical association of his district, shall be ineligible for membership of this Association for the period of five years from the date of his ceasing to hold such appointments (except under exceptional

circumstances), and shall not be met in consultation by members of this Association during the period of disqualification for its membership. But in the case of those who shall have resigned the abovementioned positions prior to the 1st day of January, 1899, the abovementioned period of disqualification shall continue for one year only from the date that they cease to hold the said appointments."

Dr. WORRELL said there was one consideration which should be paramount, and that was the maintenance of the unity and cohesion of the profession, by which so much had been accomplished. He was not in favour of extreme measures. It was sufficient punishment that the men who had acted in this disloyal and selfish manner had earned the reprobation of all who respected honourable and straightforward methods. Nevertheless, it was necessary to be careful, lest by weakness and clemency they might appear to encourage other weaklings to take office in this or similar institutions in the future. A middle course would be best, and it was right that a marked distinction should be drawn between those who now severed their connection with this society and those who continued to disregard the interests of their brother practitioners. It would act as a distinct deterrent if it were distinctly laid down that in the future the punishment would be more severe. He had much pleasure in seconding Dr. Abbott's amendment, which tempered justice with mercy, and appeared to best reconcile the divergent views of members.

Dr. MULLINS moved a further amendment,—"That any medical man who has held, since January 1st, 1898, the position of medical officer to any society which has been declared by the Council of this Association to be inimical to the interests of the medical profession, or who shall after this date accept any lodge at annual fees per member below those approved of by the local medical association of the district in which such lodge is situated, shall be ineligible for membership of this Association for a period of five years from the date of his ceasing to hold such appointment, and he shall not be met in consultation by members of this Association during the period of such disqualification." He agreed with the spirit of Dr. Abbott's amendment, but suggested that the penalty should be imposed on all those who had held office since January 1st, 1898. He was totally opposed to men who accepted positions which were contrary to the wellbeing of the profession being taken back with open arms. These men had defied and snapped their fingers at the profession, and had for some years past dragged down many of the younger members of the profession to their own level, and had mixed themselves up with the scum of the profession. A heavy penalty must be imposed as a deterrent in the future. Again, he was of opinion that the British Medical Association should recognise the scale of fees adopted by the suburban associations for their own districts, and all members of the British Medical Association should uphold this scale. He therefore moved the above amendment.

Dr. SCHRÄDER seconded Dr. Mullins' amendment, and said he thought the suggestion would meet the case. He was one of those who erred in joining the People's Prudential in its early days, but resigned after a few months, even before the Council called upon him to do so. All the men connected with these lodges had had notice to resign; he had done his best to ruin the society with which he had been connected. He had much pleasure in seconding the amendment.

Dr. CRAGO said he had an amendment which practically embraced the resolution and some of the

amendments that had been moved, but with one important omission, viz., that part of the resolution relating to the holding of lodges "at annual fees per member below those approved by the local medical association of his district." He (Dr. Crago) thought it would be unwise to pass that part of the resolution, as it made membership of the British Medical Association subservient to a rule or by-law of any suburban medical association; and as the minimum rate might be 16s. per annum in one suburb, and 18s. in another, a man might be eligible for membership if he lived in one place, but ineligible and a "blackleg" if he moved to another and held his lodge at the same rate as before. He thought that would be an absurd position for that Association to take up.

The amendment lapsed for want of a seconder.

Dr. GOODE said when he saw the resolution on the business-paper, he wondered what it was all about. Some time ago this Branch passed a resolution stating that these men should not be met in consultation. They have now been under punishment for some time; they had undoubtedly done wrong; now some desired to do right, and still it was thought well to punish them. According to the resolution passed by this Association, as soon as they resigned their positions they could be met in consultation. Indeed, he (Dr. Goode) met one of them in consultation the other day. What are we asked to do by this resolution? Why, to make this Association subservient to the local medical associations. These local societies should be put aside. They desire to ostracise certain men, and wish this Association to back them up. He had heard expressions to-night which should not have been used. Members of the medical profession should not be designated "blacklegs." He (Dr. Goode) held sufficient proxies from many impartial members of the profession to swamp the whole vote on this question, but they were informal. If it was desired to win these men back to the paths of proper practice it was not the way to do so by continuing their punishments.

Dr. WEST said that this was one of the most important matters ever discussed by the Association. Were the men who gave up these lodges to be altogether ignored? The men who remained in these societies had defied the local associations, and they had defied this Association. The punishment should therefore be severe. In his district patients of years' standing were being swept into the nets of one of these men by the canvassing which was carried on. Putting all malice and vengeance aside, he thought that something should be done to deter others from joining these societies. This question concerned the younger men of the profession, not the consultants and the older members. He (Dr. West) did not think one year sufficient punishment, and five years too much; he thought three years would be sufficient, and would move the following amendment:—"That any medical man who has held the position of medical officer to any society which has been declared by the Council of this Association to be inimical to the interests of the medical profession, shall be ineligible for membership of this Association for the period of three years from the date of his ceasing to hold such appointment (except under exceptional circumstances), and shall not be met in consultation by members of this Association during the period of disqualification for its membership."

Dr. BINNEY seconded the motion of Dr. West. He thought that five years was too long a period for ostracising (or penalty, as the former speakers had chosen to term it), at the same time he thought that the one year for those now resigning was insufficient. He could not see why those who were now in a

position to give up these appointments through having done sufficiently well by them and established themselves, should be more leniently dealt with than those who, more unfortunate, had not yet established themselves, and really, from actual necessity, had to continue them. He thought that Dr. West's amendment would mete out sufficient punishment to all.

Dr. G. ARMSTRONG supported Dr. West's amendment.

Dr. READ and Dr. MULLINS said they would accept Dr. Abbott's amendment if verbal alterations were made. Dr. Abbott agreed, and his amendment then became the resolution.

Dr. SCOT-SKIRVING said it was a matter for regret that so many of the older members of the profession made themselves conspicuous by their absence. It appeared to him that there were two parties in this question—one desirous of punishing, the other too easy, some would say far too easy. The wrongdoers should not be allowed to go without punishment; there should be a compromise. If the Council had passed Mr. Hankins' amendment, as a matter of discipline he would support it, but he was given to understand that there was division in the Council over the subject, and that this was being moved by Mr. Hankins in his private capacity.

Mr. HANKINS stated that his amendment had been carried by a majority of the Council.

Dr. SCOT-SKIRVING said if that were so he should vote for the amendment, although he did not agree with all of it. He thought five years too long. The whole matter would be blown over in less time, and another set of men, with different ideas, would perhaps be in charge of affairs in that time. These men should be punished for their wrongdoing, and should be made to feel their position.

Dr. POCKLEY said a good deal had been said about vengeance, but it was a deterrent which was required, not revenge. The matter did not affect consultants, but the general practitioners; these men should be tried by their peers. He would support the suggestion with regard to one year's disability.

Dr. West's amendment was then put to the meeting by the President, and declared negative.

Mr. Hankins' amendment was also negative.

The following resolution, moved by Dr. Abbott, was then put to the meeting, and carried with only six dissentients: "That any medical man who has held, or shall hold, the position of medical officer to any society which has been, or shall be, declared by the Council of this Association to be inimical to the interests of the medical profession, or who shall have held any lodge at annual fees per member below those approved of by the now existing local medical association of the district in which such lodge is situated, shall be ineligible for membership of this association for the period of five years from the date of his ceasing to hold such appointments (except under exceptional circumstances), and shall not be met in consultation by members of this Association during the period of disqualification for its membership. But in the case of those who shall have resigned the above-mentioned positions prior to the first day of January, 1899, the above-mentioned period of disqualification shall continue for one year only from the date that they cease to hold the said appointments."

FOR SALE, COMPLETE SET OF "AUSTRALASIAN MEDICAL GAZETTE" from January, 1882, to December, 1895 (14 years). Offers to be addressed to Mr. Bruck, 15 Castlereagh Street, Sydney.

NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

CANTERBURY SECTION.

AN ordinary monthly meeting of the above was held on September 8th, Dr. Pairman (president) in the chair. There was a fair attendance of members.

The committee reported:—

1. That a newly-arrived medical practitioner had inquired if there was any objection to his advertising certain specialties on his door-plate, and was informed that it would be establishing an undesirable precedent, and it would be ethically sufficient if he simply informed the local practitioners.

2. A deputation had been received from the united friendly societies, who, desirous of establishing a united friendly dispensary, wished to ascertain what arrangements could be made with the lodge surgeons who at present provided both dispensing and attendance. After hearing the views of the deputation, the committee was of opinion that it was a matter for the consideration of the whole body of the profession in Christchurch, and informed the deputation that a general meeting would be called, and the Section would undertake to forward the reply. This meeting was duly held on August 4th. A large number of lodge surgeons were present. Dr. C. M. Anderson was voted to the chair, and after a prolonged discussion in which everyone present had his say, affording the fullest information as to the present cost of dispensing, it was agreed that four shillings out of the pound at present paid per member to lodge surgeons should be allowed for the item of dispensing. This decision had been communicated to the friendly societies, and an answer had been just received to the effect that after careful consideration of the *pros* and *cons* of the matter they felt convinced they could not finance the proposed dispensary on the allowance of four shillings; and that, failing better terms, they would be compelled to adopt some other alternative measure.

It was agreed that a second meeting of the profession should be called to further consider the matter.

A circular was received which gave information in respect to the coming Intercolonial Medical Congress.

The PRESIDENT read a paper on "Diphtheria," which elicited an interesting discussion. Antitoxin was referred to by many of those present as affording good results. One member stated he always used it on the third day if the patient was not improved by that time; while another instanced two fatal cases, in both of which antitoxin was injected, where death had occurred within thirty hours. He was of opinion he had not used it early enough.

The annual meeting was held at the Caledonian Rooms on October 18th, 1898, Dr. Campbell (vice-president) in the chair, and an average number of members present.

Re united friendly societies dispensary,—

The CHAIRMAN informed the meeting that the second meeting of the profession took place on September 23rd. There was a large attendance. The members present decided to adhere to the previous offer of four shillings, allowing, however, five shillings for the first year as an assistance in the initial expenses, lodge surgeons to have the right of subscribing towards debentures should the necessary capital be raised in that way.

The HONORARY SECRETARY read the annual report, which showed a satisfactory state of things, and especially so in the matter of the library, which had

been largely extended during the past year through presents of medical works from various members.

The honorary secretary then tendered his resignation, as he was leaving Christchurch. This announcement was received with regret, and a hearty vote of thanks was passed to Dr. Fenwick for his past willing services.

It was also decided to place on record the loss sustained by the Section through the untimely death of Dr. Hacon.

The following office-bearers were elected for 1899: Dr. R. W. Anderson, president; Drs. R. Volckman (Bangiora) and G. Campbell, vice-presidents; Dr. L. S. Manning, treasurer; Dr. W. Thomas, local editor. The filling-up of the post of secretary was unavoidably held over.

Dr. Campbell was appointed to act as delegate to the next Council meeting, and Dr. Thomas to act as auditor.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY Meeting held at the University on Thursday, October 27th, 1898. **Present:** The President (Dr. Swift), Drs. Lendon, J. C. Verco, Morgan, Giles, A. A. Hamilton, J. A. G. Hamilton, Cavenagh-Mainwaring, Marten, Lawrence, G. C. Hayward, H. M. Evans, Poulton, Good, Fischer, Way, Borthwick, Symons, Professor Watson, and the Hon. Secretary (Dr. W. T. Hayward).

LIVING EXHIBITS.

Dr. W. T. HAYWARD showed two boys, from whom he had removed the greater part of the shaft of the tibia for acute necrosis. Both boys had been walking about since a month after the operation without the aid of crutches, they having been fitted with Thomas' knee splints.

PATHOLOGICAL SPECIMENS.

The **PRESIDENT** showed a phosphatic calculus that he had removed by supra-pubic lithotomy from a child aged two and a-half years. The wound in the bladder was sutured at the time of the operation. The child made an uninterrupted recovery.

Dr. H. M. Evans showed:—

1. **Penny**, swallowed by a boy, aged 9 years. No urgent symptoms after admission to the Adelaide Children's Hospital. Slight febrile disturbance for three or four days. Two months later got sick, and his father slapped him on the back and the penny was expelled, after a sojourn of two months in the stomach. (Dr. W. M. Campbell.)

2. **Appendix**, from a child, *æt.* 10, who died of general tuberculosis. Miliary tubercle throughout both lungs, in kidney, liver, and peritoneum. There was intestinal ulceration, and the child rapidly sank after a severe hæmorrhage from the bowel. (Dr. Campbell.)

3. **Kidney and thymus**, from child, *æt.* 7 (male). On admission, left-sided pleurisy and ascites, tapped. The chest—two pints straw-coloured fluid, the last of which was bloodstained; had been previously tapped on two occasions, about one and a-half pints drawn off on each occasion. General anasarca supervened. Urine, no albumen; no cardiac bruit, but heart apex at right nipple. A few weeks before death some large glands were found appearing on the left side of neck, just above the clavicle. *Post mortem*: The chest full of fluid; right chest a little fluid, the lung completely airless and collapsed; abdomen full of fluid. The

kidneys appeared as two huge tumours, the right one coming forward outside ascending colon, and internal to descending colon; liver large and tough; spleen small and tough. All the mesenteric glands very much enlarged, and chains of large lymphatic glands along the receptaculum chyli. Antimortem thrombosis in both femoral arteries. Marrow of sternum unusually red. (Dr. Hayward.)

4. **Piece of bone**, removed from case shown, being whole thickness of the shaft of the tibia, and beginning above at the upper epiphysis of that bone. (Dr. Hayward.)

Dr. J. C. VERCO read his paper, "Pelvic Hydatid; Removed by Perineal Incision."

Dr. POULTON said the perineal incision alone was not applicable for all cases of post vesical hydatid. He remembered a case operated upon by him in 1895, a middle-aged man presenting a large deeply-seated pelvic tumour passed one or more small hydatid cysts per urethrom. Supra-pubic cystotomy demonstrated the presence of further free cysts in the bladder, which communicated through a small ulcer of the trigone with a large hydatid sac. An incision was made through the base of the bladder and the adherent sac wall; and then, for facility of evacuation and drainage, a median perineal urethrotomy done. Large perineal tubes were retained in the empty sac and bladder. After treatment was required for about two months, and the man returned to work as a blacksmith, but appeared again with a collection of exogenous cysts—a grape-like series—the outermost projecting the aponeurosis in the outer right iliac region, and the deeper cysts lying low in the pelvis. All these were easily evacuated through a small incision, and apparent recovery rapidly ensued.

Professor WATSON alluded to cases of exogenous cysts following the removal of an hydatid cyst. He expressed the opinion that the outlook in these cases was bad, frequent recurrence of the disease being usual.

Dr. MARTEN mentioned a case in which he had adopted the perineal incision for a pelvic hydatid, subsequent to an attempt to remove it by abdominal incision.

Dr. MORGAN (for Dr. Moule) read a paper on "A Case of Acute Rheumatism Following Erysipelas."

PATHOLOGICAL SPECIMENS SHOWN BY PROFESSOR WATSON AT NOVEMBER MEETING OF SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

1. **ALMOND-SHAPED calculus**, consisting of alternate layers of uric and phosphatic acid. Removed by the supra-pubic route from a male infant, *æt.* 18 months, who has done well.—Dr. Swift.

2. **Tubal rupture**, with escape of a three-months' fœtus into the peritoneal cavity. In the specimen of tubal abortion shown recently for Dr. Morris, of Port Adelaide, the chief interest lay in the extrusion of the ovum from the abdominal ostium, and not in rupture of the tube, as in the present specimen, which was successfully removed by our President from an unipara, *æt.* 25, who had just been discharged from the public hospital, where she had been subjected to a course of expectant treatment.—Dr. Swift.

3. **Tubercular appendix**, which has become embedded in the sub-cæcal fossa. It acted as primary focus of an acute miliary tuberculosis, which carried off the patient, a boy *æt.* 10.—Dr. H. M. Evans.

4. Lymphomatous enlargement of the thymus gland and kidneys of a boy, *æt.* 10, who died of convulsive dyspnoea.—Dr. H. M. Evans.

5. Cysto-carcinoma of left breast of a multipara, *æt.* 80, who walked about within ten days of its removal (without the axillary glands). It consists of a cluster of three cysts, two of which contain growths with two poles of attachment to the cyst wall.—Dr. Way.

6. Leaking papillomatous cyst of right ovary, from a nullipara, *æt.* 48. Hydro-peritoneum with omental and broad ligament surface implantation, &c., were present, although at no time had the patient been subjected to tapping. The left ovary (removed) was affected in a much less degree. I had the privilege of seeing Dr. O'Hara operate on a similar case recently.—Dr. Way.

7. Large oophoronic cyst, from a nullipara, *æt.* 48. It is incorporated with a biscuit-shaped tumour, of stony hardness, which microscopically is an undoubted carcinoma (possibly secondary to an occult primary tumour elsewhere). Had the nature of the hard lump been realised at the time, the other ovary, which was normal in size, corrugated and firm, would not have been spared.—Dr. Way.

8. Follicular cystic ovary, the pelvic pole of which is occupied by a hard fibroma, the size of an olive. It was removed by posterior colpotomy from a virgin, *æt.* 30, with its tube and the adnexa of the other side, without involving either of the utero-ovarian arterial arches. As an additional safeguard, fine silk ligatures, both distal and proximal, were applied before closing the vaginal wound. The round ligaments were then shortened as nearly as possible in O'Sullivan's style. It is significant that a fibrous polyp was removed from the uterine cavity of this patient in 1897. The bushman, who uses no ligature, unwittingly, keeps outside the utero-ovarian arch, when spaying a cow, the ovary of which is nearly as well supplied with blood as that of the human female. Surgeons, on the contrary, seem to think it necessary to destroy the continuity of the arch, after they have ligated the ovarian vessels and a handful of broad ligament with silk thick enough to make a halter. Unless reinforced by a supplementary ligature, either of the fold, or of the artery on the face of its stump, the surgeon is apt to sometimes lose his patient from hæmorrhage.—Dr. Way.

9. Pseudo parovarian cyst, developed in adhesions, and not in the meso-salpinx. It has a thin wall, and contained clear fluid, and was removed from an unipara, *æt.* 40, in the belief that it was a parovarian cyst.—Dr. Way.

10. Solid globular myoma of anterior wall of corpus uteri, from a nullipara, *æt.* 35. A second smaller tumour is growing from the posterior wall, and pressed against the rectum. The ovary of one side was left undisturbed, as recommended by Howard Kelly.—Dr. Way.

11. Solid cricket-ball myoma of posterior wall of corpus uteri, from a nullipara, *æt.* 38. A second smaller tumour, the size of an egg, developed in anterior wall of cervix, caused the bladder symptoms which forced the patient to seek advice. As in the previous case, an ovary was left behind as a solace.—Dr. Way.

12. Soft tumour, the size of a shaddock, growing from mesial wall of left cornu in a bicornis uterus of a multipara, *æt.* 38, who died five days after operation. It evidently commenced as an ordinary myoma, but for several months before removal grew furiously. Histologically it shows a decided transition from the benign to the malignant type. The ovarian veins showed as exaggerated a development as that associated with pregnancy at term. After a smooth operation, the large intestine emptied itself satisfactorily, but the

small intestine became distended, and no doubt this was a big factor in the early death of the patient. The lungs were found thickly set with hæmorrhagic patches, the result of vascular transference from the pelvic (ovarian) veins. There was no pneumonic zone of reaction at the periphery of the patches, as would have been the case had they resulted from aspiration of vomited matter into the air tubes. At any rate, this case suggests the propriety of seeing that the easily-dealt with sigmoid flexure, rather than the small intestine, occupies the pelvis at the last moment. I have seen a woman die because the ilio-cæcal junction was compressed beneath a mass of small intestine, which passed down to the pelvis, and thus forced the blind end of a congenitally elongated cæcum into a position in the mid-line of the abdomen. In such cases, the malposition of the intestine is the less likely to right itself spontaneously, because the bowel has been subjected to the manipulation incident to an abdominal section.

13. Cancerous uterus, removed by the abdominal route from a woman, *æt.* 35. Instead of tying the internal iliac arteries, which would have rendered the necessary dissection very much safer, and would have doubtless tended to retard the advance of the disease, the operator tied the uterines as far out as he could, and, in clearing the floor of the pelvis, suddenly was confronted by a terrible hæmorrhage from a big vein beneath the vesical end of one ureter, which was inadvertently pinched for a few seconds. One assistant compressed the bifurcation of the aorta, a second transfused; but the first 10 oz. of urine passed by the patient (who has since done well) were blood-stained.—Dr. J. A. G. Hamilton.

14. Right leg of a station-manager, *æt.* 35, who sustained a compound comminuted fracture of both bones in a buggy accident five months before coming to town for amputation. The patient consoles himself with the knowledge that his three nearest neighbours on the Darling River have lost either an arm or a leg. The magnificent stump he will have is not obtainable by following the diagram in Treves' translation of Farabeuf's description of his operation. I have seen more than one surgeon led into error by that diagram, and therefore recommend a study of Farabeuf's original diagram.—Dr. J. A. G. Hamilton.

PROCEEDINGS OF OTHER SOCIETIES.

CONFERENCE *RE* FRIENDLY SOCIETIES AND THE MEDICAL PROFESSION.

THE Intercolonial Medical Conference, summoned by the Medical Defence Association of Victoria, to consider the relations between the Medical Profession and the Friendly Societies, with other matters, was held on Wednesday, November 2nd, 1898, at the Austral Buildings (British Medical Association Rooms), Collins Street, Melbourne, at 10 a.m.

The following gentlemen were present:—Drs. Clubbe (N.S.W. Branch of the British Medical Association), Jay (S.A. Branch of the British Medical Association), R. Scott (Ballarat District Branch of the British Medical Association), Dyring and F. J. Owen (Melbourne Medical Association), Buchanan and F. W. W. Morton (Medical Society of Victoria), J. R. M. Thomson and W. Kent Hughes (Victorian Branch of the British Medical Association), Daish (South and Port Melbourne Medical Association), Syme, Howard, McAdam, Hamilton, P. B. Bennie, and Eugene Anderson (Medical Defence Association of Victoria Limited).

Dr. Syme was elected President, on the motion of Drs. CLUBBE and JAY; and Dr. E. ANDERSON Hon. Sec., on the motion of Drs. HOWARD and MCADAM.

The PRESIDENT returned thanks for his election.

The HON. SECRETARY read the resolution of the Medical Defence Association Council (August 9th), calling the Conference together, and the list of Societies to whom a circular asking their attendance had been sent.

Apologies were received from Drs. Duncan and J. P. Ryan, the Bendigo Branch of the Medical Society of Victoria, the Medical Section of the Royal Society of Tasmania (who agreed to adopt any resolutions passed by the Conference), and the Medical Society of Queensland.

The PRESIDENT called on Dr. Howard to read a *précis*, drawn up by Dr. Howard and McAdam, of the answers received to the circular sent out to all members of the Medical Defence Association.

Dr. CLUBBE moved the first resolution—"That the relations between the Medical Profession and the Friendly Societies are unsatisfactory."

Dr. SCOTT seconded.

Dr. THOMSON asked how the Medical Associations work where established as Institutes.

In reply, Dr. HOWARD read the statement made by Dr. Atkinson as to the condition of affairs in Bendigo, with a large dispensary of 2,200 members, and two medical officers.

The motion was carried *nem. con.*

POINT I. was "*The wage limit, and the abuse of lodges by the wealthy.*"

Dr. MCADAM (President of the Victorian Branch of the British Medical Association) said:

I feel that that an honour has been conferred upon me in that I have been asked to open the discussion and to move the first resolution in this gathering—so far as I know, an unprecedented one in the medical annals of Australia. We meet together, as you are aware, on the invitation of the Medical Defence Association of Victoria to take counsel on matters of interest deeply important to the commonwealth of medicine in these colonies. We are here, I trust, to utter a united protest against the inequitable conditions under which too many of us are now forced to carry on our work as far as that work is concerned with the friendly societies, and, as I believe, we are met resolved to take the first important step towards the obtaining of a better state of things.

Now, it is apparent to anyone reviewing the situation that the relations at present existing between the medical profession and the friendly societies are in a most unsatisfactory footing. No doubt, and to our shame be it said, a great deal of this is chargeable to our own shortcomings in the past. We have had no union amongst ourselves, but rather disunion. We have not troubled ourselves to support individual members of the profession in any stand which they may have made against aggression and injustice on the part of the societies. We have been content to stand by with folded arms, and have allowed our brethren to wage an unequal contest which could, under these circumstances, have only one ending. Nay, some have even so far forgotten what was due to their profession and their fellow practitioners that they have not scrupled to underbid and to compete against them in order to filch for themselves a supposed advantage. We have, indeed it may be truly said, "left undone those things which we ought to have done and we have done things which we ought not to have done, and there has been no health in us."

But a change is taking place. We are beginning to

recognise whither we have been drifting. We are at last opening our eyes to the fact that if matters continue to tend much longer as they have been doing our profession will undergo a cataclysmic change, and we shall most of us have to suffer the galling experiences of a species of "white slavery."

Nor is this apprehension and this awakening confined to Australia. Similar pressure and similar crying necessities, the old country, Canada, the Cape, and other places, have already aroused in the profession a sturdy spirit of resistance, and "The Battle of the Clubs" has become a familiar phrase upon the lips.

Now, at the very outset of our discussion it is well, I consider, to lay stress upon the fact that our attitude is not one of quarrel with the original objects for which the friendly societies were started. These, if adhered to, are most laudable, and worthy of our support and help. No, what we complain of are certain abuses and innovations which the founders of these bodies never contemplated, and which, for ourselves here, we are determined to protest against, and to resist most strenuously until we have succeeded in removing them.

To other speakers has been allotted the task of dealing with some of the minor, but by no means unimportant, forms which these abuses take. It falls to my lot to ask you to consider the foremost grievance of them all, in the fact that large numbers of persons, not justly entitled to medical benefits at the absurdly low and inadequate fees paid, are now in the friendly societies, and that they are gaining admission to them at an ever increasing rate. The fees to which I allude were originally fixed to meet the necessities of artisans, labourers, and such like, but most assuredly they were never intended to embrace persons well able to pay the ordinary medical fees charged to individuals of the wealthier classes. Yet here in Victoria we find that such people do not scruple to stoop to the ineffable meanness of entering the lodges in order to obtain the services of medical men at the merely nominal rates paid. And worse still, the lodge authorities not only do not object to their entrance, but in many cases appear to encourage it. I suppose our experience here is not singular, and expect that our visitors from the other colonies have also to complain of similar injustices, but I would like to place before the members of the conference some specific instances of abuse which have come under my notice.

A short while back the Council of the Medical Defence Association of Victoria sent out a circular to the members asking, amongst other questions, if they could furnish authentic instances of wealthy and well-to-do patients who were on their lodge lists as medical beneficiaries. Here are specimens of the answers collated out of only sixty-four replies:—

The following is a *précis* of the replies to the queries in the circular re friendly societies recently issued by the Medical Defence Association of Victoria:—

Query 1: (a) Do you consider that the relations existing between the friendly societies and the medical profession are satisfactory? (b) If not, what would you suggest as improvements?

Reply: (a) 98 per cent. said "No." (b) Suggestions were numerous and varied. The vast majority considered the presence of well-to-do patients in lodges the greatest grievance, and suggested various means to bring about their exclusion. Other suggestions: The urgent necessity of a thorough organisation of the profession, and boycotting of "blacklegs;" conferences with heads of friendly societies after we have agreed as to what we want. A reduction of fees to private

patients, so as to prevent "genteel" people joining lodges. Want of fixity of tenure, and the degrading tendering system, are evidently very sore points with a good many.

Query 2: (a) Do you think that all classes of the community should be eligible for "benefit" membership? (b) If not, where would you draw the line?

Reply: (a) The negative was absolutely unanimous. (b) Replies varied; vast majority being of opinion that people with incomes of £200 and over are not entitled to medical attendance at threepence per week. A few made the limit as low as £78 per annum, and one went as high as £500.

Query 3: Do you approve of the lump sum per annum system, or that of payment per visit? What rates would you suggest as fair?

Reply: An absolute majority favoured lump sum system as most convenient and practicable, the average rate suggested being about £1 per family per annum, without medicine. A few suggested three guineas per annum, and a few went as low as fourteen shillings. Payment per visit was approved of by 25 per cent., who suggested fees varying from one shilling to five shillings. A mixed method, that of a retaining-fee of say ten shillings per family annually (to be paid by lodge), and small fees, say one shilling for consultation and half-a-crown for visits (to be paid by member), was suggested independently by several members.

Query 4: Do you think we ought to organise a society for the supply of medicine and medical attendance at low rates, and rigidly restrict the membership to the poorer classes?

Reply: A three-fifths majority approved. The rest either disapproved, or said, "Wait until we see what the societies say to our delegates."

Query 5: (a) How are you paid? (b) What "extras" are allowed? (c) What is your mileage?

Reply: (a) Without medicine, rates varied from twelve shillings and sixpence to seventeen shillings and fourpence per family per annum—average, about fourteen shillings; with medicine, from nineteen shillings to thirty shillings—average, twenty-two shillings. (b) Extras: All mentioned confinements; several specifically mentioned miscarriages and operations; a few mentioned vaccinations, anaesthetics, tooth extraction, alcoholism, and venereal diseases; one gets ten shillings and sixpence for consultation with another medico. (c) Mileage varied from one mile to seven miles; average, three miles; extra rates paid varied from two shillings per mile to six shillings per mile.

Query 6: What do you think ought to be the limits of ages for attendance on children?

Reply: Majority favoured 16, a few allowing girls to go on until 18. A large minority suggested even lower ages, pointing out that in many cases they were wage-earners before 16.

Query 7: Do you think you should be paid extra for work done after hours and on Sundays and holidays? If so, what fees would you suggest?

Reply: Majority of those in large towns favoured imposition of small fee to prevent unnecessary calls at these times; fees suggested varied from one shilling to ten shillings.

Query 8: Do you think there should be a difference in rates charged for married and single members?

Reply: Three-fifths said "Yes," the rest said "No." A few thought each child should be paid for separately.

Query 9: Have you had much experience of well-to-do lodge patients? Would you mind furnishing particulars of some?

Reply: Ninety per cent. said "Yes," and proceeded to give details (for which see special article). A few (a very few) said these people either paid them ordinary fees, or gave them something annually in addition to lodge fees.

If there is not here sufficient proof and vindication of the truth of the contention that the lodge system is being grossly abused in the direction pointed out, then evidence upon any subject is useless, and worse than useless.

Now, what is the remedy for all this? There is only one at all likely to be successful, and that is the imposition of a wage limit. As to the amount of this, the council of the association, after mature consideration, decided that it would be fair and liberal to fix it at £200 per annum. I will, therefore, conclude my remarks by moving the following resolution:—"That in the opinion of this conference of delegates representing the medical societies of Australia, it is necessary that the friendly societies should take steps to impose a wage limit upon all candidates for admission to benefits, and that the amount of this wage limit be fixed at £200 per annum."

Dr. BUCHANAN seconded this.

A long discussion ensued, in which Drs. Clubbe, Howard, Owen, F. J., Dyring, Jay, Thomson, and Morton, F. W. W., took part, after which the resolution was unanimously carried.

POINT II was "The minimum payment which should be made by a lodge member."

Dr. JAY introduced the discussion by giving the rates in Adelaide, which are—10s. for single men and 30s. for married, including medicine, within a radius of three miles. Large operations are charged for there, but are matters of individual arrangement. In some, a payment of 10s. a year is made as a retaining fee, whether married or single. In this case wives, and children to the age of sixteen, pay a nominal fee of 2s. 6d. for consultation and 3s. 6d. for visit within a radius of three miles. The age limit is sixteen in Adelaide for both sexes. Country lodges make special arrangements re mileage.

Dr. BENNIE proposed—"That the minimum be 15s. for the city, with a three-mile limit."

Dr. J. K. M. THOMSON seconded the motion.

Dr. CLUBBE thought 15s. too low, and suggested 20s. to 26s., and he approved of a small fee for each consultation or visit.

Dr. SYME suggested that the amount should be fixed fairly high, so that we might have something in hand to be possibly conceded.

Dr. HOWARD said that, on consideration, he approved of the combined system, say 10s. per annum as a retaining fee, and a small charge for each visit or consultation, with an age limit of sixteen for both sexes, and he proposed an amendment to that effect, naming 2s. 6d. for each visit and 1s. for each consultation, not including medicines, but with a limit as to the total amount payable by a member for any one year. These fees to be paid in cash at the time.

Dr. SCOTT seconded the amendment.

Drs. F. J. OWEN and DYRING also spoke, the latter suggesting eighteen as the age limit, as some lodges do not admit members till they are eighteen.

The amendment was unanimously carried.

POINT III was the question of "Extras."

On the motion of Drs. BUCHANAN and THOMSON, it was resolved—"That the following should be considered extras, and that they should be included as such in the lodge agreements, viz., anaesthetics, midwifery, miscarriages, accidents at sport, teeth extractions, operations,

and cases which do or may involve legal proceedings or court cases."

Drs. HOWARD and F. J. OWEN having spoken, the resolution was carried unanimously.

Dr. OWEN thought that we should not meet the friendly societies in a hostile manner, but discuss matters with them in an amicable way.

Dr. THOMSON would wish some limit as to how many in a family the lodge surgeon must attend, and he moved—"That attendance be limited to wife and children; widowed mother, if dependent, and unmarried brothers and sisters dependent on the member."

Dr. HOWARD, in seconding this motion, thought that doctors should insist that no one beyond the member himself should be eligible for attendance unless in good health at the time of the member joining.

The motion was carried.

PROCEDURE TO BE ADOPTED TO GET THESE RESOLUTIONS CARRIED INTO EFFECT.

Dr. F. J. OWEN moved—"That the secretary of the United Friendly Societies in Victoria be informed that these resolutions have been carried, and suggest that a conference be held between delegates from this meeting and delegates from the friendly societies. Also, that the delegates from the other colonies should arrange to lay these resolutions before their friendly societies in the most suitable manner in their opinion."

Dr. DYRING seconded this motion.

The PRESIDENT said that if we could promise that fees would be lowered to certain poorer people, it would be of great advantage in dealing with the friendly societies, and a reduction of the fees to such people would obtain the support of the Press—which was all-important; and in his opinion the profession must take some steps to deal with, and satisfactorily settle, this great difficulty.

The motion was unanimously carried.

Life Insurance Companies and low fees for examination paid by certain officers.

Dr. SCOTT moved that the fee for examination for insurance be not less than one guinea.

Dr. JAY seconded the motion, with the addition that the following insurance companies be informed to that effect, viz.:—The Citizens' Life Assurance Company, The Temperance Life Assurance Society, and The National Mutual Life Association.

This motion was then carried.

Dr. DAISH proposed that the insurance companies be asked to have a full and thorough examination in every case.

Dr. THOMSON seconded the motion, which was then carried.

Dr. HOWARD suggested that if any conferences with friendly societies are held, they should take place on the same day in each colony. Also, that the Brisbane Intercolonial Medical Congress Executive be requested to set aside a full day, or at least portion of one, for the consideration of the foregoing questions, when the action taken as the result of this conference can be considered, and discussion held as to the best means to be adopted in the future to bring about more satisfactory relations between our profession and the friendly societies, and the removal of many abuses that have crept in to the detriment of their doctors.

A hearty vote of thanks to the President was then carried with acclamation.

MESSRS. BURROUGHS, WELLCOME AND Co. have sent out a copy of their "Medical Diary and Visiting List for 1899" to every medical man in Australasia. Any practitioner who has not received a copy is requested to communicate with their Sydney office (108 Pitt-street).

LETTER TO THE EDITOR.

(To the Editor of the Australasian Medical Gazette.)

SIR,—The resolution passed at the meeting of the New South Wales Branch of the British Medical Association on the 25th of November last is in no way connected with the object for which the British Medical Association was founded, and I do not think it will receive the approval of the Council in London.

During the last year the legitimate objects of the Association have been, in a great measure, lost sight of at the meetings of our Branch, and a great deal of time has been wasted in discussing questions which are outside the province of the Association.

What have we to say, as members of the British Medical Association, to matters connected with local medical associations? Those bodies, as such, have nothing to do with our affairs, nor have we any right or power to interfere with theirs.

This resolution is, no doubt, chiefly intended to apply to medical officers of the People's Prudential Society, which, with some other benefit societies in Sydney, is disapproved of by most of us. Nobody tries, as far as I know, to justify the action of those members of the profession who have accepted positions as medical officers of that society.

I find the Council of the New South Wales Branch on February 4th, 1897, passed the following resolution: "That in the opinion of this Council no member of the Branch should meet in consultation the medical officers of the People's Prudential Society, or any medical man who is ineligible for membership of the Branch." This resolution of the Council refers to medical officers of the People's Prudential Society. I understand several of the gentlemen who held the positions mentioned in the resolution are no longer connected with that society, and, consequently, the resolution does not now apply to them.

The resolution of November 25th is the result of one passed by a local medical association, and it contains penal clauses which apply to those who now hold office in the society mentioned, as well as to those who have ceased to do so.

In my opinion this resolution is outside the scope of the British Medical Association, and I intend to propose at an early meeting of the Branch that the resolution of November 25th be rescinded, and that the vote of every member of the New South Wales Branch be taken on the question by ballot or by proxy.

I am, sir, your obedient servant,

W. H. GOODE.

159 Macquarie-street,
December 10th, 1898.

LACTOPEPTINE (Richards).—We have received from Mr. John M. Richards, 46 Holborn Viaduct, London, a sample of his well-known lactopeptine. This preparation has now been before the profession for many years, and has proved itself of great value in many cases of dyspepsia. From its composition—pepsine, pancreatin, ptyalin, lactic and hydrochloric acids, with sugar of milk—it appears to be admirably suited to assist in the digestion, not only of *nitrogenous* foods, but also in the digestion of *starchy* foods as well. It has proved of great service in some of the digestive disturbances of children, especially in atrophy and debility, and in some cases of summer diarrhoea and rickets its beneficial effect has been marked. Lactopeptine may be obtained in powder or in tablets (gr. v.), the dose being from 10 to 15 grains with each meal. (See special inset in this issue.)

NOTICES.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other colonies.

Original Articles will be inserted solely on condition that they are not contributed to any other periodical.

Contributors will have to pay the cost of illustrations accompanying their articles.

The Australasian Medical Gazette and the British Medical Journal are supplied to all Financial Members of the New South Wales, South Australian, and Victorian Branches Free of Cost.

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SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

EDITOR'S LIBRARY.

THE LIBRARY OF THE EDITOR OF THE "AUSTRALASIAN MEDICAL GAZETTE," 121 BATHURST STREET, SYDNEY, IS NOW OPEN TO ALL MEMBERS OF THE BRITISH MEDICAL ASSOCIATION, FROM 2 TO 5 P.M. EVERY WEEK DAY, HOLIDAYS EXCEPTED.

THE AUSTRALASIAN MEDICAL GAZETTE.

EDITED FOR THE PROPRIETORS BY
SAMUEL T. KNAGGS, SYDNEY, N.S.W.;
AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY
B. SANDFORD JACKSON, BRISBANE, Q.; J. W. SPRING-
THORPE, MELBOURNE, VIC.; W. T. HAYWARD,
ADELAIDE, S.A. AND; L. E. BARNETT, DUNEDIN, N.Z.

SYDNEY, 20TH DECEMBER, 1898.

EDITORIALS.

THE TREATMENT OF THE INSANE IN SOUTH AUSTRALIA.

THE state of affairs with regard to the treatment of the insane in South Australia, as described by our Adelaide correspondent (see next page), is nothing less than a grave scandal. Putting out of the question the alleged political jobbery said to have been perpetrated, there can be no two opinions as to the gross injustice inflicted on the unfortunate inmates of the South Australian lunatic asylums. It is almost incredible that a thousand patients should be under the charge of two gentlemen,

one of whom has, in addition, the duties appertaining to his position of Colonial Surgeon, and the other, who holds the onerous appointment of Surgeon and Gynaecologist, a curious anomaly, by the way, to a large general hospital, and who has also the right of private practice. We feel sure that Members of Parliament must be ignorant on this matter, or they would never allow such a condition to continue. We trust that it will not be necessary to wait till the contingency mentioned by our correspondent occurs before a radical change is effected. The remarks of the coroner are certainly none too strong; he would have failed in his duty had he neglected to forcibly draw attention to this lamentable example of neglect of a class of patients with whom we must all sympathise.

THE NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE good work inaugurated at the last annual meeting has already brought about beneficial results, and the New Zealand Branch is to be congratulated on a highly successful year. Great credit is due in this connection to Dr. Graham Campbell, of Christchurch, the general secretary, whose business-like methods, power of organisation, and capacity for hard work have contributed so much to the present stability and importance of the New Zealand Branch.

The membership of the Branch has increased to 212, and the balance-sheet for the current year shows a credit balance of £65 13s. 5d.

The annual subscription has been fixed at £1 10s., which includes the *British Medical Journal* delivered post free. Members wishing to receive the *Australasian Medical Gazette* have to pay an additional sum of 15s. per annum. It is to be hoped that all members of the New Zealand Branch will realise the importance of taking and of reading the *Australasian Medical Gazette*. In addition to the ordinary contents of a successful scientific medical journal it publishes the transactions of the various sections and branches of the British Medical Association throughout New Zealand and Australia, and should, therefore, be essential to every medical man who wishes to keep himself posted in the doings of his confrères.

The appointment of Dr. Mason, of Otaki, as parliamentary secretary, has already been attended with gratifying results. He has been most diligent and successful in his efforts to bring under the notice of the Government the necessity for active legislation upon important matters of medical interest. He has gained the consent of the Government in the matter

of establishing a State laboratory for bacteriological work, where morbid specimens from both man and animals will be examined and reported on free of charge, and where culture, media, and antitoxins will be stored and distributed as required. This laboratory will be located at Wellington under the care of Mr. Gilruth, the Government Veterinarian, a skilled bacteriologist, who at the last annual meeting of the Branch proved his fitness for the appointment by giving an excellent practical demonstration before the members of the methods of cultivating, staining, and inoculating bacteria.

The Government has also been prevailed upon to supply calf lymph free to any New Zealand practitioner on making application to Dr. Wilford, of Patea, and have further shown their sympathy with medical progress by making arrangements to issue free passes to medical practitioners and their wives for a trip by rail to the Hot Lakes district from Auckland in January next on production to the District Railway Traffic Manager of a certificate signed by Dr. Mason, of Otagi.

One of the most important papers read at the last annual meeting was contributed by Dr. Collins, of Wellington, on the subject of "Reform of the Lunacy Laws." Dr. Collins referred particularly to the deficient accommodation provided for the large number of insane patients in New Zealand, and to the lack of classification, whereby the satisfactory progress of curable cases was greatly retarded. A deputation from the meeting waited on the Honorable Mr. Seddon, the New Zealand Premier, and laid clearly before him the various important points embodied in Dr. Collins' paper, with the gratifying result that steps were immediately taken to largely increase the accommodation for the insane, and so give facilities for the very necessary system of classification.

The New Zealand Branch has good reason to feel satisfied with this record of progress during the past year, and we hope that the forthcoming annual meeting, to be held in January at Auckland, will be equally successful with that held last March in Wellington, and equally productive of progressive reform in medical politics.

FROM OUR ADELAIDE CORRESPONDENT.

THE following extract from the evidence given at a coronial enquiry touching a case of suicide at the Parkside Asylum (S.A.), taken

from the columns of the *South Australian Advertiser* is of more than local interest:—

Dr. Cleland, resident medical officer of the institution, said that he was the only medical officer of the asylum, and in addition to his duties there he had the oversight of the North-terrace Asylum, and was Colonial Surgeon, a position which involved medical oversight of country hospitals. There were 706 patients in the Parkside institution, and he did not know of any other asylum in the world where one medical man had the care of so many patients. He was not at home when the death occurred, but immediately on his return he went to the room where the body was. Everything possible had been done for the man, and witness thought that death had resulted from shock instantaneously.

The Coroner said, in addressing the jury, that the number of patients was too great for one man to carry in his brain. He had been relieved by the doctor's statement that nothing more could have been done for the deceased, even if a medical man had been present. He thought that such heavy responsibilities as rested on the medical officer, unless relieved by an assistant, were enough to cause any ordinary man to require the care of such an institution himself. He had no desire to say one word in criticism of the Government, and sympathised with the policy of economy, but if they could see their way to afford a little assistance to Dr. Cleland he was sure it would be to the benefit of the institution, and would relieve his mind of a great deal of overstrain.

The jury found that death had been caused by deceased hanging himself, and that no blame was attachable to anyone, and added a rider to the effect that, in their opinion, Dr. Cleland should have some medical assistance in supervising so large a number of patients at the Parkside Asylum.

The attention of the Premier, the Right Hon. C. C. Kingston, was called to the above in the House of Assembly. That gentleman exhibited considerable irritation at the audacity of a jury in adding the rider to their verdict, and shelved the question by saying that he would call for a report. Nothing further has been heard of the matter. Until a year or so ago, the care of the insane members of the community devolved on the Colonial Surgeon, Dr. Patterson, and the Assistant Medical Officer, Dr. Cleland. The former resided in a commodious house in the grounds of the North Terrace Asylum, the latter lived at the Parkside Asylum. On Dr. Patterson's retirement, Dr. Cleland was appointed Colonial Surgeon. It would naturally be expected that he would have been transferred to the North Terrace Asylum, with its limited number of patients, and that a medical specialist would be appointed to take charge of the Parkside Asylum, with its 706 inmates. Unfortunately, the Government were in sore straits in the difficulty of finding a local habitation for Dr. Napier, the newly-appointed Resident Senior Surgeon and Gynæcologist to the Adelaide Hospital, and his family, no suitable house in the locality being

available. The difficulty was solved by appointing this eminent gynecologist Assistant Medical Officer to the Insane, and locating him in the house vacated by Dr. Patterson, with a pleasant addition to his salary. Dr. Napier consequently holds the position of Senior Surgeon to the Adelaide Hospital, Gynecologist to that institution, and Assistant Medical Officer to the Insane, with the supposed charge of an asylum containing over 200 patients, and Ministers state with pride that he has a large private practice. Dr. Cleland, in addition to his duties as Colonial Surgeon, has practically nearly 1,000 insane patients to attend. When it is considered that there are no private asylums in the colony, it is evident that unfortunate individuals suffering from mental diseases have a poor chance of efficient treatment. On the principle that a bishop would have to be killed in a railway accident before railway mismanagement could be expected to be corrected, it may fairly be said that no improvement in lunacy matters can be hoped for until a Cabinet Minister becomes mentally afflicted.

LONDON LETTER.

THE PLAGUE IN VIENNA—INSPECTION OF MEAT IN LONDON—LONDON WATER SUPPLY—THE WHITMARSH CASE.

THE outbreak of the bubonic plague in Vienna has caused a considerable amount of excitement on the Continent, and has been the occasion of an outcry against bacteriologists cultivating the microbes of highly infectious diseases in the centres of civilisation. It appears that the laboratory attendant at the Hygienic Institute in connection with the University was the first to develop symptoms of plague. He was isolated, and two nurses told off to attend him. Unfortunately, both nurses have since died from the same disease, and Dr. Müller, who was in charge of the laboratory, succumbed after two or three days' illness. The disease appears to have particularly affected the lungs, and the patients presented all the symptoms of severe pneumonia, with marked cyanosis and dyspnoea. As extraordinary precautions were taken to prevent the spread of infection from the patients while living, and also from their bodies after death, no further cases have developed, and it is confidently expected that the progress of the disease has now been checked. It cannot but be a matter of deepest regret that the life of so able and devoted a young scientist as Dr. Müller should have been sacrificed through what must necessarily have been want of due care in manipulating the cultivations of the plague bacilli.

Another death of a doctor through infection by an antitoxin occurred at the Czech University Hospital in Prague. Dr. Lola injected himself with the antitoxin of tetanus, as many cases of tetanus had occurred in his wards. He died after four days' illness, with high temperature.

An association has recently been formed in London, called the National Association for the Prevention of

Tuberculosis. Through its officers, the presidents of the Royal Colleges of Physicians and Surgeons and Sir W. Broadbent, a communication has been sent to the London County Council urging that body to adopt a report of its Public Health Committee in which a recommendation was made for the establishment of some central administrative authority in London for the prevention of diseases conveyed by diseased meat and milk, particularly, of course, tuberculosis.

Another important matter with which the London County Council has recently been much concerned is the question of the water supply of the metropolis. This at present is in the hands of several large water companies, and in consequence of the unusually dry summer in England the water supply, particularly of the East End of London, has been extremely limited, thus involving a water famine, with all its insanitary accompaniments. The County Council has now decided to buy up all the water companies, and to take entire control of the water supply.

Another abortion case was tried last week at the Central Criminal Court, and Dr. Whitmarsh, a practitioner of thirty years' standing, has been sentenced to death. He procured abortion upon an unmarried girl by passing an instrument into the uterus and then injecting some fluid, which appears to have been some preparation of mercury, as the girl died from mercurial poisoning. There was extensive ulceration and sloughing of the uterus and vagina, and mercury was found in the liver on chemical examination. The case will be a notable one from the fact that this is the first criminal trial in England in which the accused entered the witness-box and gave evidence on his own behalf, and that while the evidence for the prosecution was mainly circumstantial, the evidence of the prisoner himself practically led to his conviction by the jury.

London, November 4th, 1898.

DEPARTMENT OF HOSPITALS FOR THE INSANE, VICTORIA. FOURTH ANNUAL CONFERENCE OF MEDICAL STAFF.

Kew, 5th October, 1898.

THE first meeting was held to-day, there being present Dr. McCreery in the chair, Dr. Watkins, Dr. Beattie Smith, Dr. Samson, Dr. Lethbridge, and Dr. Steell. The proceedings of last conference were taken as read and confirmed.

Dr. BEATTIE SMITH produced the correspondence which he had been empowered to carry on since last conference and stated that Dr. Norton Manning had been written to in terms of the resolution with the result that whilst assuring us of his warm interest in the matter of forming a Medico-Psychological Association, he anticipated various changes in his department in New South Wales which would preclude the concurrence of himself and his officers in joining us at the present time.

Since this communication was made, New South Wales has lost by resignation the services of Dr. Norton Manning, who for a life-time has firmly, judiciously, and without for a moment wavering in the interests of the insane, forced upon his Government the necessities for advanced treatment with great success. Dr. Eric Sinclair, who has succeeded Dr. Manning as Inspector-General, was written to prior to this meeting, and invited to join us and be present at our meetings, but, as might reasonably have been expected, excused himself on the plea of his whole time being occupied getting up the work of his department, and at the moment not wishing to bind his officers without consulting them.

A letter detailing these medical staff meetings which was sent by direction to the Council of the Medico-Psychological Association of Great Britain and Ireland, and published in the July number of the *Journal of Mental Science*, was read together with the reply thereto, which was couched in very favourable terms, though the conditions were necessarily strict and such as at present we were only in a position to accept as the basis for affiliation should we succeed in establishing our own society, and, in consequence, Dr. McCREERY moved:—

"That an Intercolonial Medico-Psychological Society be formed and that invitations be sent to all the Asylum Staffs of the various Australasian colonies to be present next year in Melbourne with a view to forming an association which may become affiliated with the Medico-Psychological Association of Great Britain and Ireland."

This was seconded by Dr. WATKINS and carried unanimously, and the Hon. Secretary was asked to acknowledge the letter from the home association, explaining the action taken.

The subject of nursing lectures Dr. McCREERY stated had advanced a step further, as we were now in the midst of the first annual compulsory examination for probationers prior to their inclusion on the staff at the end of twelve months' service. The examinations were being conducted by a Board consisting of the Inspector of Asylums and Drs. Watkins and Beattie Smith, each of whom examined all papers which were numbered and two of them carrying out orals and practicals—no examiner conducting his own. So far as the seniors were concerned the examination was not yet compulsory, and the only thing one could do was to block the promotion of those who were not efficient and who had not availed themselves of the facilities afforded by lectures and demonstrations, and so accept the decision of the Public Service Board that the first qualification for promotion was merit.

Dr. McCREERY stated that some time ago the Under-secretary had asked him to draw up new rules and regulations for the guidance of attendants and nurses as the Public Service Board considered the existing ones not clear enough, and these had now been prepared and were ready for circulation.

On the motion of Dr. WATKINS, it was decided that Mrs. Rosenblum be communicated with in a sympathetic letter on behalf of the staff on the occasion of the death of her late husband, our friend and fellow-worker.

Dr. O'Brien was sympathised with in his recent illness.

Dr. McCREERY now read his paper entitled "Border line insanity or imperfect insanities," comprising under the following four headings a well condensed series of views:—(a) A want of full development; cannot resist wrong actions yet not insanely certifiable. (b) A fixed chain of delusions on certain subjects while acting well on others. (c) Controlled centres enfeebled—cannot avoid temptations. (d) Intellectual faculties developed though moral tone bad—a danger to society as constituted through enfeebled will and loss of control due to drugs, alcohol, etc. The main contention of this paper was on *will power*. Will, Dr. McCreery stating, was "the act of recalling and retaining ideas with their accompanying emotions in the field of consciousness."

After a discussion and vote of thanks for the paper, the meeting adjourned till to-morrow.

Kew, 6th October, 1898.

The second meeting took place to-day. Present: Dr. McCreery, Dr. Beattie Smith, Dr. Samson, Dr. Lethbridge, Dr. Steell, and Dr. Godfrey.

Dr. GODFREY read his paper on "Some observations on the symptoms and treatment of cocaineomania," which was well received; and after some discussion and further enquiry on a subject without as yet any definite literature, Dr. Godfrey was, on the motion of Dr. BEATTIE SMITH, accorded a very hearty vote of thanks for what was really a paper worthy of his capacity for research and of great value to alienist physicians. Dr. Godfrey promised that with a little more shaping his paper would be available for publication in the *Australasian Medical Gazette*, and that he would continue his labours in this field of enquiry and observation.

Dr. SAMSON next gave the meeting some of his "Views on Asylum construction," and then Dr. BEATTIE SMITH read "Notes on some surgical cases at the Ararat Hospital for Insane" by Dr. James L. Thompson, including after a prelude of the difficulties to be overcome in Asylum surgical procedures, a detail of (1) a case of malignant disease of the testicle; (2) gangrene of the feet; (3) forcible rupture of the urethra; and (4) gastrotomy, together with the operative interference deemed necessary in each case. Much interest was taken in these cases, and while on the motion of Dr. GODFREY a vote of thanks was accorded to Dr. Thompson for his accuracy of description, Dr. BEATTIE SMITH remarked upon the neat decisive surgical skill displayed during the operations.

The last paper comprised some clinical histories of cases under thyroid treatment by Dr. BEATTIE SMITH, who detailed how in one case he had endeavoured, and that too with the crowning success of ultimate recovery and discharge, to set up artificially in the patient that inflammatory fever and thermic condition which by reason of episternal abscess had proved useful to the patient's mind at an earlier period of her history; and how in another case he had, whilst others were under treatment, given thyroid tablets to a lady whose case was of some years' standing, though of recent admission, and had for brevity's sake been viewed both before and after admission, variously, and now was placed under *diagnostic treatment* with the happiest results. An old case of myxoedema, of no very great development to outward appearance, being discharged from the Asylum about four months from the commencement of the thyroid treatment; the case book notes being:—"General increase of body bulk; firm, inelastic swelling of skin with harsh dryness; dulled expression and imperfect hair nutrition; the supraclavicular subcutaneous tumefaction and the thickened fingers being noticeable, as also the mottled face and red nose end; the memory was defective; there was irritability and suspiciousness with hallucinations and now we have dementia with slow heavy gait. The thyroid was pushed by weekly increased doses from five to twenty grains thrice daily, with the result that she became brighter, happier, conversed freely, was questioning about her surroundings, her home and her relatives. She took her diet well all through. After the weakness from confinement to bed for nearly two months, she became busy in sewing, mending, piano-playing, and took daily walking exercise specially regulated by accompanying nurse. Gradually from the commencement of the ten grains dose thrice daily the improvement took place in the lessening of the subcutaneous thickening and the brighter and more cheerful appearance. A long day can now be spent with

sewing, walking, and inside amusements with judicious rests. Returned after a two-mile walk happy and delighted, and though still with some mental impairment anxious to return home. Has been out for the day with her husband driving and walking, returning with no reluctance knowing that to-morrow she will be leaving for home. Left for home with husband under instructions to continue the thyroid treatment and report at intervals. Report at end of month very satisfactory."

With the usual vote of thanks for this paper, and to Dr. McCreery for presiding, the conference terminated.

(Signed) J. V. MCCREERY, Chairman.
W. BEATTIE SMITH,
Hon. Secretary to Conference.

PUBLIC HEALTH.

WHOOPIING cough is very prevalent in Sydney.

Instructions for the use of anti-venomous serum, or "Antivenine," are published in the *South Australian Government Gazette*.

A case of smallpox on board ship has appeared at Newcastle, New South Wales.

The Midwifery Nurses Bill, introduced into the New South Wales Legislative Assembly by Dr. Graham, was defeated by a large majority in the Legislative Council on the second reading.

The following is the Hobart Health Officer's report for the month of October:—I have the honour to report that during the month of October there were 40 deaths registered in the district of Hobart, but two of these were of persons not usually resident in the district. In the city there were 29 deaths, as compared with 21 in the corresponding month of last year. The death rate was equal to 11.76 per 1,000 per annum. The principal causes of death were: Measles, 5; cancer, 1; phthisis, 4; old age, 4; heart disease, 3; croup, 1; bronchitis, 2; pneumonia, 2; enteritis, 1; and the remainder were of a general nature.

At a meeting of the Glebe (Sydney) Council held on December 6th a long discussion took place in regard to the wisdom in the interest of public health of allowing the Diphtheria Hospital to remain in so crowded a district as the Glebe. The matter was introduced by Alderman Wilkinson, who moved "That this Council is of opinion that the opening of the Diphtheria Hospital as a branch of the Children's Hospital in the Glebe is contrary to the expressed original intention when the Children's Hospital was opened; that the existence of such Diphtheria Hospital in the Glebe is a menace to the health of the inhabitants, and that the Government should be requested to immediately remove the same to some less crowded and more suitable locality." He said when the Children's Hospital was first established it was the outcome of a resolution passed by a public meeting of citizens, and at that meeting it was distinctly laid down that no contagious disease of any sort was to be treated at such hospital. The establishment, therefore, of a diphtheria branch of the hospital was in direct contravention to the resolution passed at the public meeting. He thought the Council ought to continue to advocate the doing away of this hospital until they were successful. He had the utmost sympathy with the poor children who were patients in the hospital, but he also had the same sympathy for children who were living in the vicinity of the establishment. Alderman Williamson seconded the motion. He said the hospital was a distinct menace to public health. He had seen

patients taken there in public vehicles. On one occasion a child was brought from Sydney Hospital at 10 o'clock at night in a tram, in which he and others were passengers. He had also seen a child taken from the hospital, placed in a bus, and he was certain that child was still suffering from diphtheria. Worse than that, they all knew that when a funeral took place at the hospital the children were in the habit of congregating around the gates, and he had seen flowers picked up by these children as they fell from the coffin. Alderman Dr. W. A. West spoke in opposition to the motion. He said the hospital was a decided advantage to the district, and but for its presence many cases must prove fatal wherein a saving of life was now effected. He quoted from a vital statistics return to show that during this year out of the 145 patients taken to that hospital from all parts of the city and surrounding suburbs, only twenty-five proved fatal cases, and of these none were from the Glebe. One death only from diphtheria occurred in the Glebe in the same period outside the hospital. He considered such figures marvellous testimony of the usefulness and magnificent work the hospital was doing. The medical men and nurses were performing a work, at great personal risk, that should receive the approbation of the community. He considered the objections to the hospital being allowed to remain in its present position were not well founded; that they were imaginary and sentimental. Alderman Abrams also spoke in opposition to the motion. After considerable discussion the motion was carried on a division by six votes to five.—(*S.M. Herald*.)

VITAL STATISTICS.

SYDNEY.—There were 978 births and 573 deaths registered in Sydney during October. The principal causes of death were:—Measles, 29; influenza, 2; puerperal fever, 5; diphtheria, 2; typhoid fever, 4; bronchitis, 27; pneumonia, 39; cancer, 18; phthisis, 38; scarlet fever, 2; whooping cough, 28.

MELBOURNE.—The chief causes of death in greater Melbourne during October were as follows:—Measles, 3; diphtheria, 7; cancer, 36; phthisis, 65; scarlet fever, 1; whooping cough, 4; bronchitis, 30; typhoid fever, 5; pneumonia, 50. There were in all 896 births and 574 deaths registered during the month.

BALLARAT.—There was 1 death from measles, 1 from whooping cough, 1 from diphtheria, 3 from cancer, 5 from phthisis, 6 from bronchitis, and 7 from pneumonia during the month of October.

ADELAIDE.—There were 86 births and 71 deaths in Adelaide during September. The principal causes of death were:—Measles, 1; whooping cough, 5; cancer, 4; phthisis, 9; old age, 6; pneumonia, 6.

NEW ZEALAND.—In the four boroughs of Auckland, Wellington, Christchurch, and Dunedin there were, during October, 4 deaths from measles, 8 from cancer, 25 from phthisis, 8 from heart disease, 9 from bronchitis, and 17 from pneumonia.

WESTERN AUSTRALIA.—During the quarter, ending September 30th, there were 1392 births and 553 deaths registered in the colony. There were 30 deaths from measles, 6 from diphtheria, 33 from typhoid fever, 18 from diarrhoea, 19 from dysentery, 15 from cancer, 32 from phthisis, 26 from bronchitis, 44 from pneumonia, 33 from enteritis.

BRISBANE.—During the month of October there were 20 deaths from measles, 23 from scarlet fever, 5 from whooping cough, 4 from diphtheria, 5 from cancer, 13 from phthisis, and 13 from pneumonia.

UNIVERSITY AND HOSPITAL INTELLIGENCE.

PRINCE ALFRED HOSPITAL, SYDNEY.—Dr. F. J. T. Sawkins, who has been Medical Superintendent for the last five years, has resigned, and taken up private practice in College-street, Sydney. His successor is Dr. E. Maynard Pain. The Lecturer on Pathology in the Sydney University has been appointed Honorary Pathologist, and a second senior resident medical officer has been appointed as Assistant Pathologist under the direction of the former.

Death After Chloroform.—An inquest was held at Launceston, Tas., on November 11th, on the body of John Russell, aged 29, a farmer from the north-west coast, who died in the General Hospital on the previous day, while apparently regaining consciousness after having been under the influence of chloroform for the performance of a minor operation. Dr. Ramsay, Surgeon-superintendent, and Dr. McArthur, House Surgeon, gave particulars of the case. Deceased had been an in-patient of the hospital for a year past suffering from a tumour of abnormal size on the buttock. During that time he had been three times under chloroform, and the previous afternoon another operation for removal of the tumour was contemplated. As a preliminary step, Dr. Ramsay determined on a prior minor operation to remove two small pieces of skin to be grafted on to a young girl who had been burnt, a practice, the doctor said, which was frequently resorted to. The minor operation had been successfully performed, the mask removed, and the patient had begun to come round, when his heart failed, and he expired. Dr. Murphy, who made a *post-mortem* examination, said the organs of the deceased generally were undergoing a process of fatty degeneration, and he believed latent failure of heart was cause of death. From the medical evidence it transpired that some of the man's organs were in a most extraordinary condition. These are to be preserved as a pathological curiosity. The jury found that death resulted from failure of the heart whilst under influence of chloroform, and that no blame was attachable to anyone.

Launceston Hospital and an Honorary Staff.—The members of the Launceston Branch of the British Medical Association having failed to induce the Board of Management to alter the constitution and appoint an honorary medical staff, waited upon the Premier, Sir Edward Braddon, on November 8th, requesting him to bring about the desired reform. Sir Edward Braddon assured the members that the matter would receive careful consideration, as he had been deeply interested by the arguments used. He requested them, however, to formulate a scheme and submit it in writing to lay before his colleagues. The scheme will be forwarded on to the Government shortly, when definite action will be taken. At a meeting of the Launceston Hospital Board of Management, held on November 17th, it was decided to increase the honorary consulting staff from three to five. The Chairman announced that while the Surgeon-superintendent had full medical control of the hospital, if any patient desired a member of the honorary staff to carry out an operation, and the Surgeon-superintendent had no objections, he would be allowed to do so. The increase of the honorary staff, as well as the privilege to operate on certain cases, is looked upon as the thin end of the wedge for the reform which has been so consistently urged by the local Branch of the British Medical Association.

Some interesting figures concerning the hospitals of New South Wales are given in Part XI. of the "New South Wales Statistical Register for 1897," recently

published. The average cubic space per bed in the metropolis ranges from 1,787 feet in St. Vincent's Hospital to 651 feet in the Glebe Hospital for Sick Children. Sydney Hospital comes next to St. Vincent's, with 1,648 feet; followed by the Prince Alfred Hospital, with 1,490 feet. In the country the average cubic space ranges from 2,105 feet at Silverton (with fifteen beds) down to 470 feet (six beds) at Collarenebri. There were thirteen lepers in the lazaret at Little Bay at the close of the year, whose nationalities were as follows: New South Wales, six; England, one; Germany, one; India, one; Java, one; Fiji, one; Tanna, one; United States of America, one. Two Chinese were returned to China in 1897, and nineteen during the previous year.

MEDICAL NOTES.

Medical Magistrates.—The following gentlemen have been appointed magistrates for the colony of New South Wales:—Drs. G. T. Cooke Adams, of Collins-street, Melbourne; Walter Atterbury, of Catherine Hill Bay, N.S.W.; F. W. Kane, of Bourke, N.S.W.; W. M. Lyttleton, of Adelong, N.S.W.; E. Maynard Pain, of Prince Alfred Hospital, Sydney; Charles Stanser Bowker, of Tumut, N.S.W.; Sydney Collins Watkins, of Manly, N.S.W.; Thomas Nisbet Wright, of Stroud, N.S.W.

A Hard-worked Doctor.—At an inquest held at Adelaide on the body of John Flanagan, an inmate of the Parkside Lunatic Asylum, who was found hanging by a strap in the storeroom, Dr. Cleland stated that he was the only medical officer attached to the institution, which at present contained over 700 inmates. In addition to the oversight of this number of people, he was the chief medical officer of the colony of South Australia, necessitating the inspection of country hospitals and attendance at the North Terrace Lunatic Asylum. He said that he did not know of any other place in the world where one doctor was responsible for so many patients. The coroner sympathised with Dr. Cleland, and suggested that the Government should appoint an assistant to the doctor. The jury, in returning a verdict of suicide, added a rider supporting the coroner's suggestion.

Presentations to Medical Men.—Dr. E. M. Owens, recently surgeon of the steamship "Nineveh," and late of Brisbane and Castlemaine (Vic.), was on October 19th made the recipient of a handsome present from the owners of that vessel as a memento of his services.

The number of medical practitioners registered by the New South Wales Medical Board during 1897 was 50. The total number of registrations in force at the end of the year amounted to 1,240.

MILITARY INTELLIGENCE.

New Zealand.—His Excellency the Governor has approved of the following transfer and appointment:—Surgeon-Major Millen Coughtrey, from the 1st Battalion, Otago Rifle Volunteers, to the Otago Battalion of Mounted Rifle Volunteers. *Devonport Coastguard Artillery Volunteers* (Auckland): George Thomas Humphrey de Clive Lowe to be Surgeon-Captain.

New South Wales.—His Excellency the Governor has approved of the following appointments in the military forces, viz.:—*New South Wales Lancers*: John Besnard Wilson, medical practitioner, to be

Second Lieutenant. *Fourth Infantry Regiment*: John William Jackson, M.B., to be Second Lieutenant.

Queensland.—His Excellency the Governor has made the following appointment on the staff of the Queensland Defence Force (Land):—Brigade Surgeon Lieutenant-Colonel John Thomson, M.B., to be Principal Medical Officer.

South Australia.—His Excellency the Lieutenant-Governor has made the following appointment in the military forces:—*Medical Staff Corps (Reserve)*: Frederick David Jermyn, Esq., M.B., B.S., to be Lieutenant.

OBITUARY.

MARIE ELIZABETH AMY CASTILLA, M.B. Melb. 1893, one of the first female graduates of Medicine at the Melbourne University, died on November 11th from pleurisy and pneumonia. Miss Castilla was connected with the Women's Hospital in Melbourne.

ALFRED GINDERS, L. et L. Mid., F.P.S. Glas. 1866, L. et L. Mid., R.C.P. Edin. 1866, M.D. St. And. 1874, D.P.H. Camb. 1877, J.P., Superintendent of the Rotorua (N.Z.) Sanatorium, died on November 14th. Dr. Ginders was a colonist of twenty years' standing.

BATTLE OF THE CLUBS.

LOCAL LODGE FEES, &C. (SYDNEY).

AN IMPORTANT MEETING.

A MEETING of the Metropolitan (Sydney) Medical Societies was held at 121 Bathurst Street, at 8.30 p.m., on November 16th. The following Societies were represented by a large attendance of members:—Northern Suburbs, Western Suburbs, and Eastern Suburbs Medical Associations.

Dr. W. H. Coutie was chosen chairman. The Hon. Secretaries of the three Associations were requested to act as Hon. Secretaries of the meeting.

Resolutions passed by the Northern Suburbs, and Western Suburbs Medical Associations were read as follows:—

Northern Suburbs Medical Association:—“(1.) That any Medical man who has held the position of Medical Officer to any Society which has been declared by this Association to be inimical to the interests of the Medical profession, or who shall have held any Lodge at annual fees per member below those approved of by the local Medical Association of his district, shall be ineligible for membership of this Association for a period of at least five years from the date of his ceasing to hold such appointment, and shall not be met in consultation by the members of this Association during the period of disqualification for this membership:—

“(2.) That a copy of the above resolution be forwarded to the Hon. Secretaries of the Eastern and Western Suburbs Medical Associations requesting them to bring similar resolutions before their representative on the Council of the N.S.W. Branch of B.M.A., to support a similar resolution to be brought forward in the Council.”

Western Suburbs Medical Association.—“That any Medical man who has held for over four months the position of Medical Officer to any Society which has been declared by this Association to be inimical to the interests of the Medical profession, or who shall have held for over four months any Lodge at annual fees per member below those approved of by the local Medical Association of this district, shall be ineligible for membership of this Association for a period of from one to five years from the date of his ceasing to hold such

appointment, and shall not be met in consultation by members of this Association during the period of disqualification for its membership.”

The following resolution was carried unanimously—“That the New South Wales Branch of the British Medical Association be requested: 1. To recognise the minimum scale of fees fixed by the suburban medical associations for lodges within their respective districts. (Vide list at end of this report.) 2. To introduce an article of association ‘that any person tendering for or accepting a lodge in a suburban district at lower than such minimum rate shall be ineligible for election as a member of this branch, or if he be already a member, he shall be liable to expulsion for unprofessional conduct.’”

A sub-committee was appointed to carry out the foregoing, viz., the Chairman, Drs. Clark, Mullins, and the Hon. Secretaries of the three Associations.

The resolution of the Northern Suburbs Association was proposed as a motion as above written. It was carried unanimously, after an amendment limiting the period of disqualification to three years had been proposed and lost.

The same sub-committee of six was appointed to carry out the terms of all the resolutions in such a way as to effectually bring the matter before the New South Wales Branch of the British Medical Association.

The proceedings of the sub-committee will be published in a future issue.

The meeting then terminated.

Minimum Fees for Lodges.—We are informed that the following are the minimum local rates for metropolitan lodges (Sydney):—1. The minimum local rate for the city (proper) area, not including medicines, is sixteen shillings per member per annum and one guinea each for confinements and miscarriages. 2. That for local lodges in the Western Suburbs, not including medicines, is eighteen shillings per member per annum, and one guinea each for confinements and miscarriages. 3. That for local lodges in the Northern Suburbs, not including medicines, is one pound per member per annum, and two guineas each for confinements and miscarriages. 4. That for local lodges in the Eastern Suburbs, not including medicines, is eighteen shillings per member per annum, and one guinea each for confinements and miscarriages.

These minimum local rates have been fixed by the local medical societies respectively.

“MEAN” LODGE PATIENTS—AS OTHERS SEE THEM.

WE append a series of shocking examples of meanness culled from the replies sent in to query 9 of the list mentioned elsewhere. It is to be understood that in every case these “shocking examples” utilise the services of the lodge doctor on every possible occasion, and remunerate him with threepence (3d.) per week!!!

Well-to-do people who retain their connection with their lodge without utilising the lodge doctor's services, or who pay him ordinary fees, are not referred to at all:—

1. “One lives in a mansion worth £5,000; his wife owns and runs a racehorse. Another is a retired civil servant, owning a row of cottages; pays two guineas consulting fees when he needs further advice.”

2. “I attend lawyers, mining investors, rich people who drive a carriage and pair, wealthy tradesmen, auctioneers, etc.”

3. “Two are men owning a large amount of property, with no occupation—draw sick pay as well.”

4. "For several months attended wife of a J.P. worth several thousands. Now have several wealthy landowners on my list."

5. "An ex-mayor, and what not, with many thousands. Paid his family 200 visits and consultations in three years. Nothing extra for me. Another, well-to-do manufacturer, living in fine house; attended daughter for diphtheria. Nothing for me."

6. "A bank manager, two brewers, several well-to-do storekeepers, and a good many farmers."

7. "A leading banker worth £500 per annum, with house, takes full advantage. Wealthy storekeepers, farmers, and professional men are too numerous to mention."

8. "All leading tradesmen, two worth not less than £5,000 each; a bank manager, and factory manager. These, and such as these, expect a great deal more attention than the working-class, many of whom are most considerate."

9. Yes, been nauseated with them. J.C., worth £20,000, retired publican; J.R., £20,000 to £30,000, lives in a castle in —, an eastern suburb of Melbourne."

10. "Yes, one's will was proved at £22,000; attended him and family for thirteen shillings per annum; another was worth £5,000."

11. "One died worth £5,000."

12. "Late member for district, well-to-do club patient, but exacting."

13. "All in my lodges are well-to-do, and could afford two guineas per annum."

14. "Yes, lots of them. Property owner, income £800, pays me twelve shillings and sixpence per annum, and expects twenty guineas' worth. A civil servant, income £500, also very exacting. All leading business men, bankers, &c., in my district."

This section is more inconsiderate and troublesome than the *bona fide* club patients."

15. "This section expects more, is less thankful, and always have an idea they are not getting enough for their money. The wife generally keeps you waiting a quarter of an hour in the drawing-room while she 'does' her hair."

16. "Yes, they are much more troublesome than poorer members."

17. "Yes. Hotelkeeper, worth £5,000, paid Melbourne consultant fifty guineas for one visit."

18. "Yes; M.L.A.'s, suburban mayors, and leading tradesmen."

19. Yes, I had at one time on my list the Mayors of three of the principal suburbs of Melbourne."

20. "Yes, one gets £870 per annum, dividends from a single mine, another £600 per annum from same mine."

21. "Yes, one died worth £5000, another is a Civil Servant with £600 per annum."

22. "One with an income of over £1,000; very troublesome."

23. "One land boomer worth £40,000, another worth £15,000."

24. "Hotelkeeper worth £25,000; farmer with 1,000 acres."

25. "Yes, three or four have incomes of four figures."

26. "Several wealthy farmers, and of course both bank managers"

27. "One is worth £12,000, another £5,000, another £4,000. They are invariably very mean."

28. "One worth £600 per annum, another worth £10,000."

29. "Solicitor, £1,600 per annum, who was also a large property owner; was also legal adviser to a lodge, and made large fees out of it. He availed himself of privileges to the fullest extent. At present I have a leading bank manager, general storekeeper, J.P., and other wealthy men."

30. "I have attended, as a club patient, a man worth £70,000. A great many men in good financial positions seem lost to all sense of self-respect. In all such cases, as far as possible, I make the patient understand that for fifteen shillings they must expect fifteen shilling treatment."

31. "A gentleman with probably the largest produce business in Victoria; ex-mayor; splendid mansion in suburb; pays me fourteen shillings and sixpence per annum."

32. Members of Parliament, city councillors, well-paid officials, and others occupying forward mercantile positions.

Surely it is high time that a united and determined stand should be made against the extortions of this section, many of whom pose as anti-sweaters.

MEDICO-LEGAL.

THE REWARD FOR CHARITY.

AN inquest was held at the Royal Hotel, Granville on November 5th, by Mr. T. E. Mc'Nevin (Parramatta district coroner), touching the death of Alice Kilbut, aged 19, who died at her parents' residence, Granville, the previous day. The case created considerable interest, involving as it did a question concerning the medical profession. Mr. H. A. Richardson, with Mr. C. E. Byrnes, was present on behalf of Dr. Kearney, who had attended deceased, and Inspector Latimer appeared on behalf of the police.

Dr. James Kearney stated that towards the end of May last the deceased was brought to his surgery by her mother. He found her suffering from polypus, both sides of the nose being blocked. Witness then described in detail the operation he performed. After the operation he saw deceased at various times for five or six weeks. He recognised the seriousness of the case from the first, but did not tell deceased or her mother so. Deceased's mother not seeming satisfied with his treatment, he recommended that deceased be removed to the Parramatta District Hospital or to a Sydney hospital. Dr. Bowman was called in, and subsequently took charge of the case. In reply to Mr. Richardson, witness produced the forceps with which the operation was performed, and further described the remedies adopted to relieve pain, etc. After Dr. Bowman had commenced to attend deceased her mother asked witness to call again, saying that Dr. Bowman was not in attendance. Witness did call, but, finding Dr. Bowman was still continuing his attendance, he did not call again. In reply to Inspector Latimer, Dr. Kearney said he did not remove any bone or flesh from the nostril. Deceased was a charity patient.

Dr. Scot-Skirving stated that at the request of Dr. Bowman he saw deceased at her mother's residence, and found her suffering from malignant polypus, one of the most hopeless and terrible maladies that any human being could suffer from. He made no suggestions as to treatment beyond keeping the part clean, relieving pain, and checking bleeding. In his opinion Dr. Kearney's treatment was absolutely correct. It would not have been possible to have saved the life of deceased if treated at an earlier stage.

Dr. Reginald Bowman stated that he was called in to see deceased on July 26th. On finding that Dr. Kearney had seen the case witness asked for a consultation, and was told that he refused to attend. The

mother of deceased made assertions which he refused to believe were possible. He had consultations with Drs. Furnival and Scot-Skirving. The mother of deceased frequently asked him if he did not think that Dr. Kearney had produced the growth by his first interference. He told her that was impossible.

In reply to Mr. Richardson, witness said deceased's mother stated that Dr. Kearney had torn away several large pieces of bone and flesh, and had thrust the forceps up towards her eyes, and that deceased had quietly stood the operation without chloroform. He considered Dr. Kearney's treatment right and proper.

Dr. Violette (Government Medical Officer) deposed to making a *post-mortem* examination, and found the cause of death was cachexia and exhaustion, following malignant polypus of the nose. There was no sign of forceps or other instruments having been forced through the turbinated bone. Had the forceps violently penetrated the bone death would have occurred shortly afterwards, and deceased could not have stood the operation without chloroform. In his opinion Dr. Kearney's treatment was correct.

Mrs. Jane Kilbut, mother of the deceased, deposed as to consulting Dr. Kearney about May 31st. Witness then described the operation performed, which she said caused her daughter great pain. There seemed to be pieces of flesh and blood clots coming from the nose. She saw Dr. Kearney again, and eventually, as deceased's face kept swelling, she told the doctor. Witness then deposed to calling in Dr. Bowman and other doctors, who said nothing could be done.

Inspector Latimer stated that Mr. Kilbut had called upon him and made certain statements, but after what he had heard from Drs. Scot-Skirving, Bowman, and Kerr he was satisfied that there was no occasion for an inquest. Dr. Kearney, however, had demanded an inquiry.

The jury returned a verdict that deceased died from wasting exhaustion consequent upon the spread of a malignant polypus growth. They were of opinion that Dr. Kearney's treatment was skilful and proper.

We greatly sympathise with Dr. Kearney in his troubles and anxieties over this matter, and agree with the verdict.

CHANGES OF ADDRESS, ETC.

BROWNE, Dr. H. E., of Molong, N.S.W., has returned, after an absence of ten months in the old country.

DE LAUTAUD, Dr. H. A., formerly of Oamaru, N.Z., has commenced practice in Dunedin.

GADEN, Dr. F. H., has succeeded to Dr. Harvey's practice at Grenfell, N.S.W.

GOOD, Dr. H. A., a recent arrival, has commenced practice at Pihama seventy-six miles from Wanganui, N.Z.

HART, Dr. J. W., has removed from Gunning to Bingara, N.S.W.

HEALY, Dr. J. J., has removed from Yackandandah to San Remo, Vic.

KENNY, Dr. A. S., has commenced practice at Onehunga, N.Z.

LEONARD, Dr. H. J., has succeeded to Dr. Hart's practice at Gunning, N.S.W.

MACFARLANE, Dr. A. A., a recent arrival, has been appointed Resident Medical Referee to the Mutual Life Insurance Company of New York in Sydney.

MARTIN, Dr. A. E., has commenced practice at Ballarat, Vic.

MAW, Dr. H. S., has removed from Tumbarumba, N.S.W., to Swansea, Tas.

NEALE, Dr. ALFRED, has removed to Christchurch, N.Z., and resumed his former specialty of diseases of the skin.

READ, Dr. GEORGE, formerly of Kiama, N.S.W., has removed to Braidwood, N.S.W.

REED, Dr. H. A., formerly of Tasmania, is now practising at Cunnamulla, Q.

SAWKINS, Dr. F. J. T., late of the Prince Alfred Hospital, has commenced practice at College-street, Hyde Park, Sydney.

WESTBROOK, Dr. R. T., has commenced practice at Mount Victoria, N.S.W.

MEDICAL APPOINTMENTS.

The following medical appointments are announced:—

Andrew, J. E., M.R.C.S., &c., to be Officer of Health for City of Hawthorn, Vic., *vice* Dr. T. O. F. Alsop, left the district.

Barclay, Dr. H. C., of Waimate, N.Z., has been elected Mayor of his municipality.

Bowman, A. S., M.B. Edin., &c., to be Government Medical Officer and Vaccinator for the District of Singleton, N.S.W., *vice* Dr. Richard Reed, resigned.

Comen, H. O., M.B., &c., to be Officer of Health for Raywood Borough, Vic., *vice* Dr. J. C. McKee, resigned.

Crutchley, E. Temple, M.R.C.S. Eng., &c., to be Assistant Pathologist and Bacteriologist to Perth Public Hospital.

Gillies, Sinclair, M.D. Lond., &c., to be an Honorary Assistant Physician, Prince Alfred Hospital, Sydney.

Healy J. J. S., L.R.C.P., &c., to be Officer of Health for Shire of Phillip Island and Woolamai, Vic., *vice* Dr. W. Corry, resigned.

James, W. H., M.B., &c., to be Officer of Health for Marongshire, Vic., *vice* Dr. J. C. McKee, resigned.

Lawson, W. F. C., M.B. Edin., &c., to be Government Medical Officer and Vaccinator for Victoria District, N.S.W.

Macpherson, John, M.B., &c., to be Resident Pathologist, Prince Alfred Hospital, Sydney.

Macquarie, C. N., L.R.C.P., &c., to be a Public Vaccinator at Bright, Vic., *vice* Dr. C. N. Simons, resigned.

Pain, E. Maynard, M.B., Ch.M. Syd., to be Medical Superintendent, Prince Alfred Hospital, Sydney, *vice* Dr. F. J. T. Sawkins, resigned.

Scott, E. H., M.B., Ch.M. Syd., to be a Public Vaccinator for the District of Kumara, N.Z.

Slater, Howard, M.R.C.S. Eng., &c., to be a Public Vaccinator for Mercury Bay District, N.Z.

Trethowan, W., M.B. Aberd., &c., to be Honorary Assistant Surgeon, Public Hospital, Perth, W.A.

Wassell, J. L., M.B. Syd., &c., to be Resident Registrar and Anaesthetist, Prince Alfred Hospital, Sydney.

Walton, W. B., M.B., &c., to be a Resident Medical Officer, Prince Alfred Hospital, Sydney.

MEDICAL VACANCIES.

Wanted, a medical man, Mungindi Hospital, N.S.W. Salary, £200 per annum, right private practice. Applicants to apply to Mr. L. Bruck, Sydney, not later than December 30th, 1898. C. H. McGee, Secretary, Mungindi Hospital.

MEDICAL RESIGNATIONS.

The following medical resignations are announced:—

Alsop, Dr. T. O. F., as Officer of Health for Hawthorne, Vic.

Corry, Wm., M.D., &c., as Officer of Health for Shire of Phillip Island and Woolamai, Vic.

McKee, J. C., L.R.C.P., &c., as Officer of Health for Raywood Borough and Marongshire, Vic.

Reed, Richard, M.D., &c., as Government Medical Officer and Vaccinator for District of Singleton, N.S.W.

Sawkins, F. J. T., M.B., Ch.M. Syd., as Medical Superintendent, Prince Alfred Hospital, Sydney.

Simons, C. N., L.R.C.P., &c., as Public Vaccinator at Bright, Vic.

REVIEWS.

THE SURGICAL COMPLICATIONS AND SEQUELS OF

TYPHOID FEVER. By William W. Keen, M.D.,

L.L.D., Professor of Principles of Surgery, and of

Clinical Surgery, Jefferson Medical College, Phila-

delphia, &c., &c. Philadelphia: W. B. Saunders,

1898. Sydney: L. Bruck.

In this volume Professor Keen discusses the various

Surgical Complications and Sequelæ of Enteric Fever. His remarks are based upon tables of 1,700 cases, compiled by himself and Dr. Thompson S. Westcott, of the University of Pennsylvania. Dr. Keen, always a pleasant writer, has done justice to his subject, and has produced a very interesting work, in which the Surgical Affections Consequent on Typhoid Fever are described under the heads of the parts affected. Gangrene, Affections of Bones and Joints, Brain, Ear, Thyroid Gland, Larynx, Chest, Stomach, Abscesses. Hæmatomata, Intestinal Perforation, Affections of the Spleen, Liver, Sexual Organs, are all treated of at length. There is a chapter on Specific Mixed Infections in Typhoid Fever.

There is also a chapter on the Ocular Complications of Typhoid Fever, by Professor George E. de Schweinitz, of the Jefferson Medical College, and an appendix containing the Toner Lecture, on the Surgical Complications of the Continued Fevers, by Professor Keen, which was delivered some years ago.

The volume, which is well illustrated, should be widely read.

DWELLING HOUSES: THEIR SANITARY CONSTRUCTION AND ARRANGEMENTS. By W. H. Corfield, M.A., M.D. Oxon., F.R.C.P. Lond., Professor of Hygiene and Public Health in University College, London; Medical Officer of Health for St. George's, Hanover Square, &c. Fourth edition. London: H. K. Lewis, 1898. Price, 3s. 6d.

We are glad to see the fourth edition of this well-known and useful little volume. Professor Corfield has managed to compress an immense amount of practical information into 122 pages. It is written in plain language so as to be intelligible to the general public who take an interest in sanitary matters.

Chapter I., on the Situation and Construction of Houses, deals with Subsoil Water, Damp Soils, and other matters to be attended to in the erection of houses.

Chapter II., on Ventilation, Lighting, and Warming, is beautifully clear in its descriptions, and contains appropriate illustrations.

Other chapters deal with Water Supply, Removal of Refuse Matter, Sewerage, Water-closets, &c.

Such a book as this should be in the hands of every householder, and is especially valuable to medical men in case of infectious disease, for many fevers may be controlled by a knowledge of the subjects of which it treats.

FIRST AID TO THE INJURED. Six Ambulance Lectures by Dr. Friedrich Esmarch, Professor of Surgery at the University of Kiel, &c. Translated from the German by H.R.H. Princess Christian. Sixth Edition. London: Smith, Elder, and Co., 1898. Price, 2s.

Professor Esmarch's little book, which now appears in the sixth edition, has been translated into English, French, Dutch, Italian, Danish, Norwegian, Swedish, Icelandic, Flemish, Finnish, Russian, Polish, Hungarian, Roumanian, Servian, Spanish, and Japanese. It is, therefore, abundantly evident that it contains interesting practical matter.

It is elementary, being intended only for the guidance of those sensible persons who may wish to answer the question—what shall I do in case of accident or emergency? The text is clear, the illustrations apt, the type good, and the general get up is worthy of praise.

DISEASES OF THE NERVOUS SYSTEM: A HANDBOOK FOR STUDENTS AND PRACTITIONERS. By Charles K. Beevor, M.D., Lond., F.R.C.P. H. K. Lewis, 136 Gower-street, London, W.C., 1898.

The object of this handbook is to enable students and practitioners to know how to examine patients suffering from diseases of the nervous system and assist them in marshalling their facts in a definite manner, and also to serve as an introduction to the study of larger standard works on neurology. Some of the earlier chapters are devoted to the method of taking a case and the examination of patients. Following these are descriptions of the anatomy and physiology of the nervous system, chapters on the diseases of the membranes of the spinal cord and of the spinal column, including inflammation of the spinal cord or myelitis degeneration and tumours of the spinal cord. In a lucid manner the writer treats of diseases of the cranial nerves and membranes of the brain. Finally, in the concluding chapters, organic functional diseases of the brain are dealt with at some greater length. The book is copiously illustrated and printed in excellent type.

THE PRACTICE OF MASSAGE: ITS PHYSIOLOGICAL AND THERAPEUTIC USES. By A. Symons Eccles, M.B., M.R.C.S. Eng., &c. Second Edition. London: Baillière, Tindall and Cox. Sydney: L. Bruck. 1898.

This is one of the best hand-books on the subject of massage that we have yet read. It is written by one who has a special practical knowledge of his subject and who does not attempt to describe any modes of employing massage in the treatment of disease of which he has no personal knowledge. The first edition which appeared in 1895 having been quickly exhausted, Dr. Eccles has revised and altered the present edition to bring the matter up to date. The work is eminently readable, full of practical information and is thoroughly abreast of the times.

In the first chapter there is a very clear description of the manipulations and the mode of applying massage; while the second describes the physiological effects. The therapeutic uses of massage and its application to various diseases and ailments are described in the remaining seven chapters.

There is a good index, but we should like to see some illustrations in the next edition.

CONSERVATIVE GYNÆCOLOGY AND ELECTRO-THERAPEUTICS: A PRACTICAL TREATISE ON THE DISEASES OF WOMEN AND THEIR TREATMENT BY ELECTRICITY. Third edition, revised, rewritten, and greatly enlarged. By G. Betton Massey, M.D., Physician to the Gynæcic Department of Howard Hospital, Philadelphia; late Electro-Therapeutist to the Infirmary for Nervous Diseases, Philadelphia; Fellow and ex-President of the American Electro-Therapeutic Association, of the Société Française d'Electrotherapie, of the American Medical Association, etc. Illustrated with twelve full-page original chromolithographic plates in twelve colours, numerous full-page original half-tone plates of photographs taken from nature, and many other engravings in the text. The F. A. Davis Co., publishers, Philadelphia, New York City, Chicago (Ill.), 1898.

The exhaustion of the second edition of the author's work on "Electricity in the Diseases of Women" necessitated the preparation of a third edition some time since. It was found desirable to re-write and re-

state so many of the facts connected with the application of electricity to the diseases of women, in order that the very latest advances in this subject might be adequately represented, that an entirely new book was the result. What was originally a mere treatise on the use of electricity in fibroid tumours and certain other affections has thus been transformed into a treatise on the medical and surgical diseases of women, with special reference to the therapeutic use of electricity. The work will well repay the study of anyone interested in this branch of practice. Many of the illustrations are half-tone reproductions of actual photographs, and there are several original coloured plates of cases of "Erosion of the Cervix," and of cases of "Endometritis," in which the artist (Mr. Xanthus Smith) has faithfully reproduced the appearances met with in these conditions.

AN EPITOME OF THE HISTORY OF MEDICINE. By Roswell Park, A.M., M.D., Professor of Surgery in the Medical Department of the University of Buffalo, etc. Illustrated with portraits and other engravings. The F. A. Davis Co., publishers, Philadelphia, New York, and Chicago.

There is no doubt but that an examination in the history of medicine should form part of the entrance test to a medical curriculum, and the sooner such a state of affairs is effected the better for the profession.

This volume represents an honest effort to bring the most important facts and events comprised within such a history into the compass of a medical curriculum, and, at the same time, to rehearse them in such a manner that the book may be useful and acceptable to the interested layman. The writer first undertook this subject in a series of lectures given in the medical department of the University of Buffalo. As to when a medical student should be compelled to study the history of medicine (we hold that it should be a necessity for such to be done):—perhaps it would be better as a subject of the preliminary examination. Certainly no man in the future should be deemed qualified for the higher degrees or diplomas who is not versed in this important branch of the, so to speak, belles-lettres of the evolution of our profession.

Such a work as the one under notice should be in the possession of every well-read medical man.

HEART DISEASE: With special reference to Prognosis and Treatment. By Sir William H. Broadbent, Bart., M.D., Lond., F.R.S., F.R.C.P.; Physician in Ordinary to H.R.H. the Prince of Wales; Consulting Physician to St. Mary's Hospital and the London Fever Hospital, etc., etc. And John F. H. Broadbent, M.A., M.D., Oxon., M.R.C.P. London: Baillière, Midall, and Cox. Sydney: L. Bruck, 1897, 8vo, pp. 331. Price, 10s. 6d.

This is a work which may be said to represent our existing knowledge of heart disease. It consists for the most part of a reproduction of lectures on "Prognosis in Valvular Disease of the Heart," delivered before the Harveian Society in 1884, and of the Lumleian Lectures on "Prognosis in Structural Diseases of the Heart," delivered before the Royal College of Physicians of London in 1891 by Sir William Broadbent. Prognosis in heart disease was the subject of a paper by the author in 1866 when house physician to Dr. Gibson. The subject of treatment has been engrafted on the foregoing lectures for the purposes of this volume.

We can confidently recommend this volume as one containing an up-to-date account of heart disease, and being, as it is, written by one of the most distinguished practitioners in that branch of medicine.

RESPIRATORY EXERCISES IN THE TREATMENT OF DISEASE. By Harry Campbell, M.D., B.S. Lond., F.R.C.P. Lond., Physician to the North-West London Hospital, and to the Hospital for Diseases of the Nervous System. London: Baillière, Tindall and Cox, 1898. Sydney: L. Bruck.

By modifying the respiratory movements in certain ways we can produce profound effects upon the organism. Not only can we regulate the absorption of oxygen, and the elimination of the respiratory excreta, but we can also influence the circulation of blood and lymph, both generally and locally." This is why it appeared to the author that some of these effects might be useful in the treatment of disease, and after investigation he had come to the conclusion that properly-devised respiratory exercises had a great therapeutical value.

The volume consists of twenty-six chapters, of which the first twenty are devoted to the physiology of respiration. Chapter XXI. deals with the various kinds of breathing exercises, the following chapters dealing with the various diseases in which these exercises are useful.

The work is well written, but we should like to have less of the physiology and more of the practical work than the author has given us. We should also like to see some diagrams, as they serve to fix the various movements in the memory. Beyond this we have nothing but praise.

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STUDDY.—On the 11th December, at Riverstone, the wife of W. B. Studdy, M.B., Ch.M., of a son.

CLINICAL RESEARCH.—Dr. Litchfield is prepared to make examinations for medical men as follows:—
1. Diphtheria bacilli. 2. Tubercle bacilli. 3. Widal's reaction. All information supplied by the above at 118 Glebe-road.

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